UNIVERSITY OF ALBERTA

# PRECOMPETITIVE PREPARATIONS IN PROFESSIONAL HOCKEY

BY

JUDITH LOUISE KEATING

A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfillment of the requirements for the degree of MASTER OF ARTS.

DEPARTMENT OF PHYSICAL EDUCATION AND SPORT STUDIES

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Date April 2nd 1992

## DEDICATION

Dedicated to my first teachers, my parents, Andrew and Ann Keating

## ABSTRACT

The purpose of this study was to examine the process professional hockey players follow before each competitive game after arriving at the rink. A purposeful non-probability sample consisting of fifteen professional hockey players between the ages of 21 to 32 years of age was interviewed. Interviews were conducted at the beginning of the regular season and then two to three months later. Data were collected by means of unstructured audio-taped interviews, participant observations, and detailed fieldnotes.

A grounded theory approach was used. The systematic analysis of interview transcriptions yielded common categories which were linked together. The emerging categories were substantiated through additional data collection, and were validated by both the players and by the researcher's observations.

The findings of this study indicate that precompetition preparation is experienced as a process resulting in optimal readiness. The process is comprised of five phases directed by time: the arrival, dressing, on-ice warm-up, off-ice adjustments, and the team ritual. As individuals progress through each phase, they are getting the body ready, getting a feel, and getting the mind ready.

The players' descriptions of the process revealed that they implemented rituals and routines as strategies to order their preparation. These rituals and routines included a variety of physiological and psychological techniques. The findings indicated that the degree of adherence to and complexity of routines differed significantly among the players. Veteran players used more structured and complex routines than rookies. Their routines operated at both the macroroutine and microroutine levels, whereas the rookies' routines did not. Furthermore, it was found that the routines were particularly beneficial at away games where the surroundings were less familiar. The role of the

coach was minimal during the five phases of preparation. However, it is recommended that coaches be more aware of each player's individual needs, routines and more specifically optimal levels of arousal experienced prior to each game.

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My thesis is not just a result of reading, writing, and editing text, as important as those skills are. Theses are written by graduate students who need to be nurtured and encouraged. My family and friends provided me with that support. I wish to thank my Mum, Dad, Brian and Hilary who shared my initial anxieties and fears and believed in me throughout my Canadian 'adventure'. Also my close friends in Sydney who continued to correspond and encourage me throughout my long absence.

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# I. INTRODUCTION

Prior to competition all athletes need to prepare themselves. Precompetitive, inclusive of pregame preparations, are both physical and psychological in nature. Psychological preparation is becoming increasingly important particularly at the elite level where athletes possess similar physical skills and the difference between winning and losing is embedded in the behavioral efficiency of the athlete. Psychological preparation requires an athlete to utilize skills such as concentration, focusing and refocusing, arousal control, relaxation, goal setting, positive thinking, and calming the mind before competition occurs.

An athlete may carry out pregame rituals inclusive of psychological skills while preparing for competition. Despite media attention and the widespread belief in the prevalence of ritualistic behavior in sport, little empirical attention has been focused on this area. Most research has concentrated on superstitions in general, and even classified ritual as superstitious behavior (Neil, 1975, 1982; Neil, Anderson & Sheppard, 1981; Gregory & Petrie, 1975; Gregory, 1979; Gmetch, 1972; Becker, 1975; Buhrmann, Brown & Zaugg, 1982).

Much of the research to date investigates "sport as ritual" rather than "ritual within sport" (Smith, 1976; Blanchard, 1988; Cheska, 1981; Harris, 1983). Yet athletes do use a variety of pregame rituals that are an important part of their physical and psychological preparation. It would be beneficial for both athletes and coaches to become more sensitive to the diverse forms pregame rituals can assume and the functions they serve. Athletes can then implement psychological skills as part of their rituals, eliminating distractions and allowing for a more focused preparation.

In order to structure effective precompetitive preparation strategies for their athletes, coaches should have a better appreciation of the impact these pregame rituals

have on their players. Research indicates that the incidence of pregame rituals increases with higher levels of competitive involvement (Neil et. al. 1981). Professional hockey is an example of a sport in which athletes frequently perform pregame rituals.

**Statement of the Problem**

Many research studies have focused on superstitious behaviors exhibited and reported by athletes (Neil et. al. 1981; Gregory & Petrie, 1975; Gmetch, 1972; Buhrmann et. al. 1982). These studies describe in detail, the superstitious beliefs and idiosyncratic behaviors of athletes, and in particular the kinds of rituals, fetishes, and taboos adopted by athletes. However, only a couple of studies have considered what these behaviors really mean to an athlete (Womack, 1979; Dunleavy & Miracle, 1981). One reason for this has been the methodological problem facing researchers who wish to study a topic of a personal nature. An athlete's rituals are often private and self-disclosure of these behaviors can be difficult.

Often athletes do not admit to ritualistic practices for fear that they may be viewed as 'irrational and superstitious' (Neil et. al. 1981). In a study on the incidence of superstitions among athletes, Gregory & Petrie (1972), used a self report questionnaire, and found that only 35% of athletes openly admitted to being superstitious in the sporting context. However, 51% indicated that they were aware of other athletes' superstitious beliefs. Clearly the need for a less obtrusive and a more flexible method of collecting data will help to acquire richer data perhaps resulting in a greater understanding and application of the concept ritual as it exists in sport.

**Purpose and Rationale**

On the day of competition coaches aim to have their athletes attain an ideal performance state (I.P.S), a state typically associated with the athletes' peak performance. The I.P.S is the unique psychological state that allows athletes to

perform at or near their performance potential. Each athlete needs to discover the conditions under which they perform to their optimum potential (Tutko, 1976). Performance is likely to be enhanced if preparation is repetitious and systematic (Williams, 1986). Pregame rituals are utilized by athletes for many reasons including (a) to focus attention, (b) to organize internal and external stimulus, (c) to isolate oneself from others, (d) to create team cohesion, and (e) to bring good luck. However, Sherman (1988), warns that athletes are vunerable and the use of rituals can be "non-functional". If the athlete becomes obsessed with the ritual and it is not performed correctly, preparation and hence performance may be negatively affected.

The purpose of this study is to explore the process that professional hockey players experience before each game, the type and the prevalence of rituals applied during this precompetitive preparation. A model validated by the players outlining the process of maximizing readiness emerged from the data.

**The Research Question**

The central question that guided this study was:

"What are the experiences of professional hockey players as they prepare for a competitive game after arriving at the rink?"

Subquestions that were also addressed in the study were:

1. What are the differences between precompetitive rituals and routines in professional hockey?

2. What psychological and behavioral functions do these precompetitive rituals and routines serve?

3. What specific activities do hockey players engage in as part of their final preparations for a game?

**Definitions**

*Ritual:* Any formalized, repetitious action or series of actions that are emically rational and potent.

*Emic:* The informant's subjective perspective on reality.

**Format of Thesis**

This thesis shall be presented in the following format. Chapter two provides an overview of the literature on precompetitive preparations, rituals in general, and rituals as they apply to sport. In Chapter Three the researcher describes the philosophical framework of the study design. The design is presented, along with ethical considerations for the study. In Chapter Four the researcher will present the findings of the study in relation to the process of precompetitive preparations. Chapter Five contains a discussion of the research method used and also how the findings relate to the review of literature as outlined in Chapter Two. In Chapter Six the researcher presents a summary of the study and makes recommendations for future research. Although not central to the thesis this researcher decided to provide an Addendum which is a personal account of the research process, in deference to Mills (1959) who suggests that the process, can in many cases, be more informative than the product.

## II. LITERATURE REVIEW

Sport at the professional level may be stressful, intense, emotional, and physically demanding on the players. Coaches and players are constantly searching for new ideas and strategies that are effective in generating optimal readiness in every sense. The hours immediately prior to the competition are critical to determine a player's physical and psychological readiness. How a player engages his cognitions, emotions, and behavior at this time could be the difference between success and failure. According to Grimsley and Williamson (1988) rituals and routines are influenced by many variables, for example, individual differences among players, varied coaching philosophies, available resources, facilities, organization of time, schedule, and actual physical preparation.

The phenomenon of ritual as it occurs in various cultures has been studied extensively by anthropologists and sociologists (Tambiah, 1981; Leach, 1966; Bloch, 1986; Turner, 1967; Malinowski, 1948). Recently, researchers have investigated the phenomenon as it occurs within the sport environment (Gmetch, 1972; Neil, 1982; Zimmer, 1984; Gregory & Petrie, 1975; Southard, Miracle & Landwer, 1989; Colburn, 1985; Wyllie, 1976; Van Raalte, Brewer, Nemeroff & Linder, 1991). The review of literature that follows considers the main theories of ritual that have emerged in anthropology and sociology and discusses how these apply within the sporting context. Problems researchers face are identified and the need for more qualitative research in sport is highlighted.

### Ritual in General

#### *What is Ritual?:*

In anthropology and sociology, ritual has been defined in many ways. Turner, refers to the concept of ritual as "formal behavior for occasions not given over to

technological routine, having reference to beliefs in mystical beings or powers" (1967, p. 19). Other anthropologists (Eitzen & Sage, 1978; Gluckman & Gluckman, 1977; Firth, 1973; Womack, 1979), have found it useful to distinguish ritual from routine with reference to the potency of ritual. For example, if a player believes their behavior is innately powerful or powerful in controlling supernatural beings or forces it is considered to be ritualistic.

Some anthropologists view ritual as a performative act (Tambiah, 1981; Bloch, 1986; Turner, 1967). That is, a formal action or a series of repetitious actions performed by a participant that may be viewed by an observer as irrational according to his or her cultural concept of rationality. For the participant the rationality may reside in actually performing the act and is referred to as "emic rationality" (Tambiah, 1981). Therefore a ritual may be non-rational, but it cannot simply be classified as etically irrational. According to Borman, LeCompte and Goetz (1986), an etic perspective occurs when the researcher imposes meaning on data.

***Ritual in Response to Stress:***

Although according to Turner's (1967) definition, ritual is not essential to technical performance, anthropologists have provided evidence that rituals have an impact on human affairs. Malinowski (1927; 1948), who researched the Trobriand Islanders suggests that ritual is associated with high risk activities, the risk being expressed in terms of physical danger to participants or the possibility of failure of a venture. Malinowski also asserts that as the stress associated with the activity increases so too does the occurrence of the rituals (1927). However, from his field studies of Andeman Islanders, Radcliffe-Brown (1939), argues that rituals and the fear that they may not be performed correctly, in fact produce stress. Thus performing a ritual may be viewed as counter productive.

***Ritual as Communication:***

Some anthropologists and sociologists describe ritual as a form of expressive symbolic communication (Leach, 1966; Wallace, 1966; Tambiah, 1981; Bloch, 1986). Ritual as a communicative device, conveys information succinctly through various mediums. Formalized, repetitious movements, chants, songs and words convey meaning to both participants and observers (Tambiah, 1981). For example, the New Zealand All Blacks rugby union team always perform the Maori, "Haka Taparahi" dance before each international game. It is a shouted posture dance originally done preceding battle. Now the dance is performed before the rugby game commences. The dance is directed to an audience, in this case the opposing team, and is intended to put fear into them before the play begins. It is also a means of psyching up, and of generating feelings of confidence, courage and excitement in the All Blacks team themselves before each game.

In 1965, Durkheim proposed a theory of social ritual to account for certain aspects of religion. Since then sociologists have found that Durkheim's theory has a wide range of application and significance extending beyond religious conduct and into everyday secular affairs (Goffman, 1967; Parsons, 1968; & Collins, 1982). That significance is found in the sociological recognition of a type of activity which, although apparently serves no utilitarian purpose, contributes to social solidarity through its expressive or symbolic affirmation of collective values (Colburn, 1985). A group of people within a culture can become more cohesive and co-ordinated as a result of their participation in a ritual.

Tambiah (1981), views ritual as a form of communication but focuses on the elements of time and duration as performative aspects of ritual. According to Tambiah, ritual is performative in three ways: (a) it is a formal act, (b) it is dramatic, and (c) it has

indexical values. As a formal act a ritual is conventional, rigid, repetitious, and it fuses messages through repetitious acts (1981). The indexical value of a ritual refers to the ranking of the participants, the importance of the location and the duration of the ritual. For example, the All Blacks' "Haka Taparahi" is always led by the team captain, and performed at the half way line as this boundary brings the players close to their opponents. Tambiah suggests that these indexical values express, create, and reinforce power for the people who perform them (1981). It will be shown later how indexical values can be applied to rituals performed in sport.

Finally, anthropologists and sociologists have presented several theories to explain the phenomena of ritual that may be useful when investigating the occurrence of pregame rituals within sport. Some of these theories have been tested (Malinowski, 1948), others are yet to be applied in the sporting context.

**Ritual in Sport**

***What is a Pregame Ritual?***

Pregame rituals are primarily a part of an athlete's physiological and psychological precompetitive preparation. Several researchers investigating ritual in sport have referred to ritual as a category of superstition based on Gmetch's (1972) classification of superstitions in sport. He categorizes superstition as either: (a) ritual, (b) fetish or, (c) taboo. (Gregory, 1973; Neil, 1982; Zimmer, 1984). Through participant observation and interviews with professional baseball players, Gmetch contends that ritual activities are a part of superstitious behaviors. However, Gmetch failed to indicate the scientific methods he used to ensure the validity and reliability of these three categories. Due to this lack of adherence or reference to a methodology on which Gmetch bases his conclusions, it is unclear how generalizable or valid these categories are.

Because some researchers (Buhrmann, et. al. 1982; Gregory & Petrie, 1975; Sherman, 1988; Van Raalte, et. al. 1991), have cited ritual as a category of superstition it is important to define superstition as it appears in the sports literature. Johoda (1969), defines superstition as a state where "one's fate is in the hands of unknown external powers governed by forces over which one has no control" (p. 116) and many researchers ascribe to this view. This definition is similar to Turner's (1967), definition of ritual. Both refer to the belief that one's fate is in the hands of mystical beings or external powers.

Numerous researchers have commented that athletes are generally hesitant to talk about their ritualistic behaviors (Neil, 1982; Womack, 1979; Zimmer, 1984). One reason why athletes do not talk about ritual is that society places sanctions on "superstitions" (Womack, 1979). "Science has taken on almost a mystical value for us, and we like to think of ourselves as "rational" (Womack, 1979, p. 35). Due to the personal nature of ritual and the idea that it is an irrational superstitious behavior, the collection of "rich" and "meaningful" data has been limited. However, it appears that the two concepts, ritual and superstition are in opposition. A superstition may be irrational, but according to Tambiah a ritual is usually emically rational (1981). When researchers describe ritual as a category of superstition they assume an ethnocentric position by applying their own mode of reasoning, that is, technical means-ends calculations.

Although some research investigating ritual in sport has been carried out (Southard, et. al. 1989; Neil, 1975; Lobmeyer & Wasserman, 1986; Gmetch, 1972; Colburn, 1985; Womack, 1979; Dunleavy & Miracle, 1981; Buhrmann & Zaugg, 1987; Van Raalte et. al. 1991), the findings are somewhat limited due to confusion emanating from varied definitions of terms. In two separate quantitative studies of

basketball players, Lobmeyer & Wasserman (1986), define routine in the same way that Southard et. al. (1989), define ritual. This tends to weaken the researcher's arguments and as a result their findings are less credible.

***Level of Involvement:***

Studies focusing on various sports support Malinowski's (1948) contention that ritual is associated with high risk activities that may cause bodily harm to the participant. From years of personal experience playing professional baseball, Gmetch (1972), found that more ritualistic behaviors were exhibited by players in positions involving risk and uncertainty. For example, pitchers and batters performed more rituals when compared to the outfielders.

Similarly, rituals in hockey focus on the goaltender, a position viewed as risky and dangerous (Neil, 1975; Gregory, 1979; Womack, 1979). Research conducted by Samuelson (1957), reported that competitive divers displayed more ritualistic behaviors than competitive swimmers due to the greater incidence of injury in diving and the increased dangers associated with dives of varying degrees of difficulty.

As athletes become more involved in a sport, or move from an amateur to a professional level, the degree of uncertainty and risk increases (Buhrmann & Zaugg, 1981; Gregory & Petrie, 1972). Neil, et. al. (1981), hypothesize that the longer and greater the involvement an athlete has with a sport the greater the incidence of superstitious behaviors. Recreational activities are expected to elicit fewer rituals when compared to the more organized professional sports. These researchers found that male varsity hockey players, who participated in more practices and competitive games per week than varsity women, intramural men or intramural women, displayed considerably more ritualistic behaviors (Neil et. al. 1981). Their research results

support the hypothesis that endorsements of superstitious behaviors associated with a sport increase with involvement in that sport.

Womack (1979), interviewed and observed professional athletes because she believed that the highly stressful environment and the social complexity of sport interaction epitomized conditions under which one would expect to find ritualistic behavior. From personal observations Womack noted that rituals were more common on the day of competition rather than during training or practice sessions. In the present study, practice sessions referred to training sessions that excluded an opposing team, whereas competition always involved the presence of an opposing team where some external reward (e.g. points) was being contested. This provides further support for the level of involvement hypothesis.

These studies indicate that as the level of involvement increases, there is more risk and uncertainty for an athlete, and consequently more ritualistic behaviors are exhibited. However, studies have failed to ask professional athletes what these pregame rituals actually mean or what impact they have on their preparation or even their performance outcome.

***Ritual in Response to Stress:***

Dunleavy and Miracle (1981), formulated a sport specific theory based on Malinowski's contention that stress is reduced through the use of ritual. Unfortunately these researchers do not indicate the research methodology used to formulate their theory. Dunleavy and Miracle view ritual as a mechanism for the management of anxiety states which are induced by precompetitive or competitive stress (1981). However, no studies to date have tested this theoretical model.

In support of Radcliffe-Brown's contention that rituals can be counterproductive, Sherman (1988) describes rituals as "non-functional" influences on

athletic performance. She claims that athletes become so preoccupied with the performance of their rituals that they interfer with preparation causing stress. Wrigley (as cited in Neil, 1982), agrees that if a ritual becomes standardized it may become a secondary source of anxiety if not performed properly.

***Ritual as Communication:***

Ritual in sport as a form of symbolic communication has been investigated and discussed extensively (Harris, 1983; Colburn, 1985; Dunleavy & Miracle 1981; Duthie, 1978; Blanchard, 1988; Southard et. al. 1989). Dunleavy & Miracle (1981), suggest that this symbolic communication operates on two levels. First, through the use of selective attention and cue utilization, individuals communicate with themselves. Wallace (1966), defines this as auto-communication. Second, the ritual involves social communication, whereby meaningful exchanges between two or more athletes takes place. Wallace (1966), refers to this as allo-communication. In competitive swimming, the notion of territorial or personal proxemics is communicated to others when the athlete isolates himself behind the diving block during the precompetition ritual.

Durkheim's (1965), theory of social ritual is closely linked with Dunleavy & Miracle's second level of communication (1981). Team rituals may coordinate athletes and give them a sense of identity and cohesiveness through movements, chants or words. In a study involving professional baseball, hockey and football players, Womack (1979) found that teams adopt pregame rituals to create team morale and build self and team confidence.

Tambiah's (1981), contention that ritual is a form of communication in a performative sense has received little attention in relation to ritual in sport. Few research studies have investigated the meaning and the implications of the formal and

dramatic qualities of the ritual. However, more attention has been given to the indexical values of the ritual which include the ranking of participants, the importance of the location and the duration of the ritual (Tambiah, 1981). Southard et. al. (1989), in a study involving ten basketball players, found that preshot rituals of a short duration were associated with more successful free-throws than rituals of a long duration.

The significance of the location of the ritual has been investigated by several researchers (Neil, 1975; Gregory & Petrie, 1975). By means of self-report a questionnaire, Gregory & Petrie (1975), found that rituals in hockey were directly associated with the scoring features of the game. That is, invariably it was the goaltender who stopped the opposing team from scoring and therefore the goaltender was the prime focus of the pregame ritual. It would be interesting to find out if the positioning of the players in relation to the net has any symbolic significance. If definite positions are assumed, does this reflect a symbolic hierarchy within the team and therefore affect the confidence and self esteem of the players?

**Summary**

This review of literature on the phenomenon of ritual, reveals an incongruent picture regarding the impact ritual has in the sporting context and more specifically in the pregame ritual. Quantitative studies classify ritual as a category of superstition and go on to describe and rank order these superstitions in terms of their occurance. It appears that the experience of the pregame ritual from the athlete's perspective is poorly understood by both athletes and coaches. Furthermore, studies conducted in this area are fraught with conceptual and methodological problems, and tend to ignore the athlete as the primary source of insight, that is, rarely are the athletes directly asked about their experiences, without perhaps imposing researcher assumptions and biases on them.

Although the investigations cited in this review do provide information regarding particular aspects of the pregame ritual, they represent a fragmented body of knowledge which does not contain the necessary information for sport psychologists and coaches to understand and effectively support the athlete during pregame rituals. In light of this situation, it is important to examine pregame rituals from the athlete's viewpoint. This perspective of inquiry will provide data regarding the athlete's perceptions of pregame rituals and the functions they perceive them to serve. An understanding of these issues will broaden the coaches' and the sport psychologist's knowledge of this experience and increase their effectiveness in understanding the specific needs of athletes as they start their final preparations for the competitive event.

# III. METHOD

The nature of the research question, the purpose of the study, the current understanding of the phenomena, and the constraints of the subjects and setting, all provide guidance for the researcher in selecting an appropriate method of inquiry (Field & Morse, 1985). After careful consideration of the above factors, the researcher chose a qualitative mode of inquiry to explore the experiences of professional hockey players as they prepare for a game.

A qualitative approach was considered logical and appropriate for several reasons. First, because little is known about the topic, the research question was categorized as exploratory, "What are the experiences of professional hockey players as they prepare for a game after arriving at the rink?" Second, the purpose of the study implied that a description of the experience of the precompetitive preparation should be pursued from the athlete's perspective. Third, the choice of a qualitative approach was further justified by the fact that the athlete's experience of precompetitive preparations, including pregame rituals had not previously been comprehensively or systematically examined. In the following chapter, the qualitative method selected for this study will be presented and issues of data collection, data analysis, reliability, validity and ethical considerations will be discussed.

## Symbolic Interaction

Symbolic interaction theory provided the framework on which the researcher based this study. Symbolic interaction theory is a view of the social world as an experience that is dependent upon the interactions that occur between an individual and the environment and the individual's interpretation of the meaning of these interactions. It is a theory about human action.

Blumer (1972), one of the early proponents of interactionism, believed that "human beings interpret or 'define' each other's actions instead of merely reacting to each others' actions...Thus, human interaction is mediated by the use of symbols, by interpretations or by ascertaining the meaning of one another's actions." (p.145).

Blumer is opposed to approaches that interpret human interaction as just 'stimulus' and 'response'. When humans interact, Blumer views any 'response' as being: "not made directly to the actions of one another but instead is based on the meaning which they attach to such actions." (Rock, 1982, p.36). For example, when hockey players come to the net and tap the goalie on the pads it is an expression of their support for him.

Symbolic interaction is used frequently in fields of study where researchers are interested in human behavior. Categories of behavior or situations or phenomena can be viewed from the perspective of the participants, without the restriction of preconceived assumptions. The researcher wishes to know what the participant is experiencing, what the participant decides is significant to note, how the participant interprets the situation, and what the participant decides to do.

How do athletes interpret the pregame ritual? What does it mean to them? What interactions do they have as a part of their precompetitive preparations? What common set of symbols and understandings have emerged to give meaning to these athlete's interactions? Only through close contact, direct interaction, naturalistic inquiry and inductive analysis would it be possible to understand the symbolic world of these athletes.

**Grounded Theory**

The methodology selected for interpretation of the data was grounded theory. This specific qualitative method was developed by Glaser and Strauss in the late

1960's. A grounded theory approach is particularly useful when "there may be some research in the area, but there are no good theories, and in particular, are no theories which are comprehensive explanations of all or most aspects of the phenomena in question" (Quartaro, 1986, p. 2). This method considered the phenomena under study in its totality (Chenitz & Swanson, 1986), and enabled the researcher to view the experience of precompetitive preparation from the athlete's perspective, that is from an emic point of view.

The grounded theory approach promotes creative thinking as it requires the researcher to simultaneously collect, code, and analyse data (Hutchinson, 1986). Data is collected and analysed concurrently in order to give direction to the data collection process. A theory which describes the form of precompetitive preparation and the role of rituals in preparing the athlete for competition has emerged from this investigation.

**Sample**

Research indicates that the incidence of pregame rituals increases with the degree of risk associated with the sport and the level of involvement of the players (Gregory & Petrie 1975). The sample consisted of fifteen Canadian professional hockey players. "Professional" refers to any athlete who satisfies the following criteria: (a) A player who gains at least 50 percent of his livelihood from pursuing the sport itself. Alternatively amateurs only supplement a principal source of income earned in another capacity, and (b) A player who engages the majority of his time in the pursuit of the sport (Stebbins, 1992).

Theoretical sampling methods were utilized to select participants. Theoretical sampling, also called purposeful sampling, is the selection of new data sources on the basis of the emerging theory (Glasser & Strauss, 1967). Any category or concept identified in the on-going data collection can be used as the key factor in selecting the

next participant. For example, having interviewed and analysed several transcripts, the researcher in this study realized that she needed to interview certain players with authority on the team in order to validate and contribute to the findings that had emerged. Subjects were interviewed until the data was saturated, that is, until no new information was being supplied.

Throughout the data collection, coding and theorizing phases it was important to search for negative cases. A negative case is a subject whose experience of precompetitive preparation negates the pattern of behavior emerging from the majority of interviews (Field & Morse, 1985). For example, several players were observed who appeared somewhat isolated during the team ritual. It was necessary to understand how they were preparing at this time and they were subsequently approached for interviews. A couple were willing to participate in the study. However, some players did decline when approached.

A pilot study was conducted in July and August, 1991 utilizing four players from the local varsity hockey team. These subjects were interviewed for 30-45 minutes. After the data had been analysed a second 45 minutes to one hour interview took place with these four players. An experienced interviewer listened to the audio-tapes to provide feedback on the researcher's interviewing techniques, and the approriateness and sequencing of the questions. Only subjects who spoke English were interviewed.

**Data Collection**

Data sources for a grounded theory study can range from formal interviews, behavioral observations, newspaper reports, scientific literature, fieldnotes, etc. In fact, the concurrent use of data sources to help explain and expand the theory is a part of the unique approach of grounded theory methodology. Since the researcher was

seeking rich descriptions of athlete's precompetitive experiences, unstructured open-ended interviews and participant observations were utilized to collect data. These data collection methods are recognized as useful and appropriate when conducting exploratory research (Berg, 1989). These two techniques provide the researcher maximum flexibility and allow an opportunity to focus on a particular area or alternatively keep the focus broad. Both interviewing and participant observation will be discussed briefly.

***Interviewing***

By using a scheduled unstructured interview the researcher does not bias the theory by introducing preconceived concepts into the data too early (Chenitz & Swanson, 1986). This type of interview does not have a formal set of questions to ask, except for an opening question such as, "Could you describe to me in as much detail as possible everything you do from the time you arrive at the rink to the time of the first face-off?" The second interview is more structured because the researcher is attempting to densify (i.e., get a thicker description) a category of data. For example, "When you joined the team how did your ritual change?"

Morse suggests that more structured interviews may be used later in the research in what is termed "secondary sampling" (1989, p.117). In this type of interview participants who were not in the initial sample are asked to verify the theory. In this study subjects fourteen and fifteen were secondary informants and were asked such questions as, "Some players tell me that the team ritual is an individual thing, is this true for you?"

Subjects were solicited on an individual basis at the annual physiological testing camp. At this time the subjects were informed of the purpose of the study and asked to

participate on a voluntary basis. They were informed that they were free to withdraw their consent and terminate their participation in the study at any time.

Interviews were arranged with individual players at a convenient time and were initially held during a three week preseason training camp. Subjects were interviewed twice, and the second interview was conducted after the initial analysis was completed midway through the regular season. Three of the subjects attended only one interview due to an increased demand on their time as the season progressed and one player was traded to another team following the first interview.

The informed consent forms and demographic data forms were given to the subjects before the first interview took place (see Appendices A and B). During the interviews the subjects were free to refuse to answer questions (this never actually occurred), and to ask the researcher any questions relevant to the study. Demographic information such as age, playing position and years of experience with the current team was collected. However, in order to protect the subject's anonymity, this information is presented as group data rather than as individual data. A general description of the sample is shown in Table 1.

All interviews were audio-taped and fieldnotes describing facial expressions and body language were taken by the researcher. The audio-tapes were then transcribed by the researcher and their associated transcripts were assigned an identification number and stored in a locked filing cabinet in order to protect the subjects anonymity and confidentiality. The researcher and her supervisor were the only people with access to this information during the study.

***Participant Observation***

Another method of collecting data in qualitative research is through the use of behavioral observations. Information required to answer certain research questions

Table 1. *General characteristics of the study sample*

| **Characteristics** | **Range in Years** |
|---|---|
| Age | 21-32 |
| Number of years playing hockey | 14-29 |
| Number of years in professional hockey | 1-13 |
| Number of years with current team | 1-13 |
| Positions played | Forwards (7), Defence (6), Goalies (2) |

may not be obtained in interviews. When using a combination of interviews and observations the researcher is engaging in participant observation (Field & Morse, 1985). Participant observation is particularly useful when verifying what has been said in an interview. Through the use of participant observation the researcher may answer questions related to implicit or unconscious behaviors which the subject is unaware of.

Participant observation allowed for the observation of behaviors that the players were unaware of or felt were unimportant in their preparation. Since the primary purpose of participant observation is to observe a typical situation it was essential this observation occurred during both preseason and regular season games in an unobtrusive manner. Consequently the on-ice pregame preparations for two preseason exhibition games and six regular season games from September 1991 until February 1992 were observed. Fieldnotes were taken in order to validate comments made by the players in the interviews. Fieldnotes also allowed the researcher to document on-ice behaviors and later question the players about these.

Field and Morse (1985), warn researchers that the major threat to validity in participant observation is a change in the participant's behavior when the observer is present. A media pass was obtained which permitted the observation of behaviors from various vantage points. At no time were the players aware that their behavior while on the ice was being observed by the researcher.

**Data Analysis**

Unlike other research methods which follow a linear sequence of analysis, the grounded theory method is circular in nature (Glaser, 1978). Three basic steps must be followed by the researcher: (a) coding the data, (b) classifying the codes into categorical schemes, and (c) discovering the core categories. The emerging categories eventually

become integrated into a substantive theory as the researcher continually collects and analyses the data.

In this study, the analysis of the transcripts of interviews involved the elaboration of open codes from the issues and themes that the subjects discussed during the interviews. Player's responses were coded by writing the name of the code in the right hand margin of each transcript. As data collection continued, these initial codes became condensed and were eventually sorted into categories. Categories are defined as abstractions.

The categories that emerged from the data were mutually exclusive. The researcher compared all new data with previous data to look for commonalities or negative cases. Data collection ceased when all categories were saturated, or no new information emerged which added to the understanding of the precompetitive preparations the players experienced.

**Validity and Reliability**

Every qualitative researcher seeks to accurately conceptualize and describe the phenomena being investigated (Field & Morse, 1985). Inherent to this endeavour is the researcher's responsibility to demonstrate the credibility of his or her findings because this determines the value of scientific research, whether qualitative or quantitative (Le Compte & Goetz, 1982). In order to appropriately address the issue of credibility, the researcher must ensure that threats to the reliability and validity of the findings are minimized. Although all researchers attempt to establish the credibility of their findings, it must be recognized that the criteria for assessing the reliability and validity of qualitative studies are different from those employed in quantitative studies primarily because the methods and aims of qualitative research are different from those of quantitative research (Sandelowski, 1986).

The following strategies were used by the researcher to enhance the validity and reliability. First, the selection of a suitable and useful sampling method. The criteria of appropriateness and adequacy have been suggested by Morse (1986), for evaluating sampling strategies in qualitative research. Morse defines the criterion of appropriateness as referring "to the degree in which the method of sampling 'fits' the purpose of the study as determined by the research question" (1986, p. 185). The central objective of the data collection for this study was to obtain data that was comprehensive, relevant and detailed. Consequently, a non-probability or non-random sampling method was utilized as it facilitated the development of an understanding of the phenomena being investigated, and it enhanced the researcher's ability to obtain both rich descriptions and to elicit meaning. The particular kind of non-random sampling that was employed in this study was a purposeful or theoretical form of sampling as this approach allowed the selection of participants who met the theoretical needs of the investigation.

In contrast to the criterion of appropriateness, the adequacy of a sampling approach refers to the quality, completeness, and amount of information provided by the informants (Morse, 1986). In this study, the researcher ensured the criterion of adequacy was met in several ways:

1. The researcher continued theoretical sampling until all categories were saturated. In other words, sampling and data collection ceased when no new information was found, or when information became repetitive and the researcher achieved a sense of coherence. In addition, internal validity of the findings was strengthened by actively seeking negative cases.

2. Efforts to minimize any threats to validity or reliability were reflected in the researcher's attempt to verify the data by asking the subjects about the same content in

different ways in the same interview. This type of concurrent validation enhanced the accuracy of data collection.

3. The researcher's transcriptions and interpretations of the data were confirmed and validated by the subjects during the second interview in order to minimize researcher bias or distortion.

4. The researcher's interpretation and analysis of the data was reviewed with professional colleagues. A qualitative research support group was formed and provided an environment for such discussion to take place.

5. Within the findings chapter, examples cited by the subjects have been used to explain and present the data.

6. The researcher's interview style was assessed by two committee members in order to examine the researcher's ability to direct the interview with open questions and to check for biases that may have affected the data collected.

7. The researcher sought to recognize and explore all assumptions about the experiences of precompetitive preparations with athletes in order to develop an understanding of the effect that the researcher herself might have on the data collection and analysis. Repeated discussions with other individuals enabled the researcher to explore any possible biases and assumptions.

**Limitations**

The theory may be limited in it's generalizability by a number of factors. First, only professional hockey players were interviewed. Possibly different results would be found among both professional and amateur athletes involved in other sports. Second, only volunteer subjects were interviewed. These athletes may have personality differences from a group of non-volunteers. Finally, the subjects were Canadian

hockey players. Sampling from other populations in the future will bring generalizability to the findings.

**Delimitations**

The delimitations imposed by the researcher include investigating male athletes involved in professional hockey. Also, only the hockey players were interviewed as a means of obtaining their perspective and not the coaching staff. Further studies could investigate the experiences of precompetitive preparation from the perspective of coaches, team psychologists, trainers, and spectators etc...

**Ethical Considerations**

Several strategies were used to ensure the ethical adequacy of this study. Ethical approval from the ethics review committee of the Faculty of Physical Education and Sport Studies, University of Alberta was obtained. All participants were informed of the purpose of the study and an informed consent was obtained from each subject before interviewing commenced. Finally, the anonymity and confidentiality of the subjects has been established by deleting all identifying information from the transcripts and assigning a code number to each participant. All audio-tapes, field notes and transcripts were kept locked in a filing cabinet throughout the study. The findings from this study increased the understanding of precompetitive preparations and the impact it has on an athlete and on the team.

## IV. FINDINGS

In this chapter the researcher's interpretation of the data is presented. The purpose of the research was to explore and describe the experiences of professional hockey players as they prepare for a competitive game and to identify commonalities or patterns of behavior within the experiences. A greater understanding of the team ritual; its purpose, structure and meaning from the players' perspective was sought. The interviews with the players provided descriptions of the players' interactions. The actions were analysed and coded into categories. Direct quotations have been used to illustrate and support the findings.

The findings follow the temporal flow of the preparation as identified by the players. The period of preparation that the researcher focused on began when the players arrived at the rink and ended with the start of play. Throughout this chapter all references to the 'game(s)' will represent competitive games against other National Hockey League (N.H.L) teams. Due to the richness of the data collected, it was decided to structure the findings in the following way to ensure that relevant data would not be omitted. Five separate phases, with distinct time constraints, clearly formalized the players preparations. The five phases of preparation were: (a) The arrival, (b) Dressing, (c) On-ice warm-up, (d) Off-ice adjustments, and (e) The team ritual.

Three components to the preparation which progress through the five phases also emerged from the data. The three components include: (a) Getting the Body Ready (Physiological), (b) Getting a Feel (Psychophysiological), and (c) Getting the Mind Ready (Psychological). These will be discussed in detail later in this chapter.

An indepth analysis of the team ritual focusing on it's structure, functions, and impact on the player's precompetitive preparations will be presented. Pregame routines were essential in preparing players for games. Two levels of routines; macroroutines

and microroutines were identified and the significance and importance of these in the process of preparation is highlighted. Finally the role of coaches from the players' perspective during the preparation period will be presented. A description of the time frame and primary purpose of each phase will now be discussed briefly and these five phases will be referred to throughout the chapter.

**The Five Phases of Preparation**

Table 2 illustrates the five phases the professional hockey player experienced before each game and the associated timing.

The Arrival:

The arrival phase extended from the time the player arrived at the rink until he began dressing for the game. The arrival at the rink was the first and the longest phase in the player's preparations. Although there were some differences in the preparation the players undertook for away games, they placed considerable importance on the time that they actually arrived at the rink:

> ...me and a couple of the other guys are the first guys to come and then guys come later on. After that usually you're supposed to be here two hours before the game.

> I think you get there a little early. Everyone always says two hours before a game. For me that's a little early.

Based on previous experience in the lower levels of hockey, the players arrived to home games individually at a time they found suitable. However, if the players did not arrive at the rink two hours before the game they were penalized by the club. During the arrival phase players spent time preparing sticks, stretching, treating injuries, relaxing, joking around, or meeting with the media. The arrival phase for the hockey players interviewed ranged from one to two hours in length.

Table 2: *The Five Phases of Pregame Preparation in Professional Hockey*

| | | |
|---|---|---|
| PHASE I | **THE ARRIVAL** | Up to two hours |
| PHASE II | **DRESSING** | Twenty minutes |
| PHASE III | **ON-ICE WARM-UP** | Twenty minutes |
| PHASE IV | **OFF-ICE ADJUSTMENTS** | Twenty minutes |
| PHASE V | **TEAM RITUAL** | Two minutes |

Dressing:

Hockey is a contact sport which requires the players to wear protective clothing and padding. Players repeatedly emphasized that dressing for a game was different to dressing for a regular practice. These differences included the amount of time spent putting the equipment on and the precision with which this activity was performed. One of the players explained:

> When you're dressing you want to make sure everything's right. In practice you just sort of throw it all on and get out there and work hard and it's over, but for a game you want to make sure. I mean you're doing things differently in the game too, you're going to be blocking shots. You have to have you're pads right so you don't get hit in the wrong spot, ...or maybe you want to put extra padding in your shins. A lot of guys put a little extra in for games, just taking your time to make sure everything's done right.

Despite the fact that individual players dressed at their own pace before each game, the music in the dressing room was turned off by the captain one hour before game time and players recognized that this was the signal to begin dressing. In this study the average amount of time players took to dress was approximately twenty minutes.

On-Ice Warm-up:

In hockey each team is given a twenty minute on-ice warm-up which begins fourty-five minutes before the start of a game. At this time both teams are assigned one half of the rink to warm up. According to the players interviewed, the purpose of the warm-up is to go out on the ice and skate around, to increase the heart rate, to stretch, to handle the puck, and to check the equipment:

> ...once you step on for warm-up, try to turn it on a bit and pick up the pace. Try to get a bit of adrenalin flowing and a sweat.

> I usually stay on the ice late, later than most guys so that I can feel my legs. I just shoot the puck around, feel the puck and stick handle.

> ...try to get my tempo on the warm-up 'cos that's the most important part. It's the only chance to really prepare yourself physically.

The coaches were not involved in the on-ice warm-up and although individuals were constantly preparing themselves, the captain and assistant captains directed both the players and the order of the preselected drills. Music was played during the warm-up and was used as a cue, along with a verbal signal from the captain, to change the pace of the drills. Players then returned to their respective dressing rooms after the twenty minute on-ice warm-up.

Off-ice Adjustments:

During the final twenty minutes before the start of the game the players make any necessary alterations to their equipment prior to returning to the ice. This is the last opportunity the players have to prepare both physically and psychologically before returning to the crowded stadium and the start of the game. A player described how he spent this time making adjustments to his equipment:

> I could be retaping sticks or cutting off new sticks...Sharpening my skates again, or rivets in my skates might be loose. I have a couple of glasses of water then sit and think.

Team Ritual:

Although the structure of the team ritual varies from team to team it would be difficult for an observant spectator of the game to be unaware of it's occurrence in professional hockey. The entire hockey team returns to the ice two minutes before the start of play. This is the last time every player is on the ice during the first period. Two minutes before the game begins the referee blows his whistle to remind the players

the game is about to begin. Upon hearing this signal the players move like bees around the hive, or in this case the goaltender's net, and in particular the goaltender. Within two minutes, players have performed their role in the ritual and quickly dispersed from the ice or to the blue line ready to commence play. Players describe this ritual as:

> ...an on going tradition. If you didn't have a ritual you'd have players running into each other. Players like to say good luck to the goaltender.

> ...before the game everybody is huddled around the crease. Everyone pats everyone in the same place.

The team ritual was the only part of the players' preparation that required the entire team's involvement simultaneously. At the conclusion of the ritual, players were ready to begin the game.

The five phases the players experienced were ordered and controlled by time. Although preparation occurred on an individual basis, the players in this study were very conscious of the clock in the two or three hours leading up to the game. Timing was crucial to the smooth transition from a relaxed mode to an optimal level of arousal needed to play the game at this level. Some of the players felt that the amount of time in the arrival phase was too long. They found themselves becoming distracted and actually trying to fill in the time. One player commented:

> I don't like getting there too early. There's just more things to think about, I'm more relaxed at home, the rink it's a more serious atmosphere.

**Components of Preparation**

As each player progressed through the five phases in his preparation it became apparent that there were three components to be considered. 'Getting the Body Ready', 'Getting a Feel,' and 'Getting the Mind Ready.' When these three components were

combined the player tried to achieve a state of optimal readiness. Table 3 illustrates the process of maximizing readiness in relation to the five phases already discussed.

**Getting the Body Ready**

'Getting the body ready' was a category that emerged early in the data analysis and related to any aspect of the player's preparation that was physiological in nature. For example, when a player had to ice an injury or seek some form of treatment from a trainer before the game, it was categorized as physiological. It became evident that the older players in this study arrived at the rink earlier because they often needed treatment for some or other injury. Two of the more experienced players explained:

> ...5.00p.m to 6.00p.m is normally, ah, therapy time 'cos generally I have an injury of some type, probably 60% to 70% of the games I'll have an icepack on me for some reason. I'll spend 20 minutes icing and maybe 5 or 10 minutes ultrasounding.

> I usually arrive three hours before a game. I always have a leg massage, yeah front and back of the legs before the game.

After interviewing several players, it became apparent that physical space, both on and off the ice, was an important aspect of each individual's preparation. The dressing room contained a stall for each player where all his equipment was hung in readiness for the game. Adjoining the dressing room were five other rooms. The trainer's room complete with massage tables and whirlpool, the training room, where the players could warm up on the stationary bicycles, do weights or stretch as in fact many did. The lounge, where players could sit and watch television, relax or talk to other players was the third room. The stick room, where players spent time cutting and taping sticks to perfection and the coaches' room where players dialogued with the coaching staff, were provided with reprimands, constructive criticism or final strategical information made up the complement of additional rooms.

Table 3. *The process of maximizing readiness*

| | Phase I<br>*Arrival* | Phase II<br>*Dressing* | Phase III<br>*On-ice Warm-up* | Phase IV<br>*Off-ice Adjustments* | Phase V<br>*Team Ritual* |
|---|---|---|---|---|---|
| **GETTING THE BODY READY** | 1. Change clothes<br>2. Therapy time<br>3. Massage<br>4. Stretching | 1. Stretching | 1. Increase heart rate<br>2. Puck handling<br>3. Stretching | 1. Final stretch<br>2. Hydrate<br>3. Re-tape injuries | 1. Loosen legs<br>2. Physical contact |
| **GETTING A FEEL** | 1. Tape sticks<br>2. Relax<br>3. Listen to music | 1. Comfortable equipment | 1. Get tempo<br>2. Check equipment<br>3. Check rink | 1. Final equipment check -skates, sticks, padding. | 1. Fitting in<br>2. Equipment comfortable |
| **GETTING THE MIND READY** | 1. Joking around<br>2. Visualization | 1. Visualization<br>2. Focusing attention<br>3. Team talk (strategy) | 1. Building confidence<br>2. Focusing attention | 1. Self talk<br>2. Positive thinking<br>3. Motivation (leaders) | 1. Motivate self and others<br>2. Focusing attention<br>3. Team cohesion |

All of the players interviewed performed the majority of their stretching at the end of the arrival phase before donning their bulky protective equipment. By stretching prior to dressing, the players felt greater and more efficient flexibility could be achieved without the obvious restrictions imposed by their equipment. Stretching was often done at a specific time, with a specific group of people or in a particular place. For example:

> ...when I stretch out I like to be away so I just stretch in the weight room while there's nobody in there and just stretch by myself.

> ...there's about 3 or 4 of us that stretch right about the same time. Usually start about 6.00p.m, three guys mainly.

> ...in the same place all the time. With the same guys yeah, at the same time.

The amount and intensity of stretching the players did during the five phases varied. Certain players wanted to complete their stretching off the ice in order to take full advantage of the twenty minute on-ice skating time. Another factor that contributed to differences in the amount of stretching related to the player's position. The goaltenders in this study spent a lot of time stretching especially on the ice. For each game two goaltenders were dressed; a starter and a backup. Because only one goaltender was at the net at a time, the other goaltender spent time stretching. The job of goaltending demands great flexibility, agility, and range of motion and in order to avoid injuries great care was taken to stretch thoroughly. The number and severity of a player's injuries influenced the amount of time and intensity of the stretching. Another variable was body size; the bigger players spent more time both warming up on the ice and stretching on the ice.

Players indicated that the on-ice warm-up was the most important time to get the body ready for the game. It was their only opportunity to handle the puck while skating around and increasing their heart rates. Some players explained:

> ...you have to get your body warmed up by shooting otherwise your first shift you might pull a muscle.

> I usually stretch quite a bit so I don't have to stretch too much [on the ice]. And then I'll try to get a good warm up, a good sweat.

> I try and stop as many as I can and get a good sweat up.

> I don't think of the game when I'm warming up on the ice. I don't think of what I have to do, I just 'am I feeling good?' That's the way I feel, skating, passing just 'is something sore?' When I'm out for warm-up I'm just out to get my body the way it should feel.

Players who felt the need to stretch on the ice always did so in a specific place. From the observations the researcher made of this phase accurate predictions could be made regarding the place and the exact time that stretching would likely occur. For example, a fieldnote taken by the researcher states:

> 'After focusing on _____'s behavior for the last five games it appears that he skates anti-clockwise twice around the net and back to the red line. He then stops at the boards directly in front of his bench, lays his stick on the ice and facing his own goal begins to stretch. This continues for two to three minutes when he collects his stick and resumes skating (F.N 27).

In order to avoid dehydration it was a common practice for the players to hydrate both on and off the ice prior to the game. Players talked about the need for

drinking coffee, water and occasionally Gatorade, particularly during the off-ice adjustment phase just prior to the team ritual. Apart from avoiding dehydration, players commented that drinking these fluids helped to 'wake them up.' The final behaviors to get the body ready included readjusting equipment, adding extra padding, and retaping injuries so that they felt physically ready to begin play.

> I untie my skates and take all the tape off my ankles and ah take my upper gear off and just sit there. At about five minutes left, tape up my ankles again, tie my skates, put on my upper gear and that's it.

> I change my top, put a dry t-shirt on, get a drink of water and just sit there and wait to go back out there.

The team ritual in professional hockey is a very physical act. Players are skating towards the net in a particular order and each player's movement pattern is deliberate and at times quite dramatic. Most players skate to the goaltender and tap him on his leg or arm pads once or several times. Words of encouragement are also exchanged at this time between players and the goaltender. It is the last time the entire team are on the ice together and after sitting in the dressing room for as much as twenty minutes, this is the last opportunity to ensure that final adjustments are sufficient and the legs are feeling loose. One player described his movements at this time:

> I come in here, I turn in and then when I turn to go behind the net and come around and I tap the goalie on the pads, always the same way. I just do it for my legs mainly and because when you're going around it gets the legs moving again after the break.

Because professional hockey is a fast moving physical game where players are being forechecked, driven into the boards or involved in fights, the physical preparation cannot be taken lightly. In fact, thorough preparation of the body is essential to the longevity of the player's career as a professional. It was evident that the older veteran

players found the eighty game regular season physically gruelling and that they needed to take more time and greater care during their physical preparation for the games. Veteran players also pointed out that if they felt confident about their physical readiness then they went into the games psychologically confident. In contrast, the rookies did not connect their physical preparation with their psychological preparation. The rookies found it easier to focus on the physical preparation and lacked confidence in their ability to prepare psychologically.

**Getting a Feel**

The second component 'Getting a Feel,' which emerged late in the data collection and analysis, refers to psychophysiological aspects of a player's preparation. Behaviors that combined both mental and physical processes, such as relaxation, were categorized as "getting a feel." Other behaviors in this component included; taping sticks, ensuring equipment felt comfortable and getting into a rhythm or tempo on the ice.

In professional hockey every player feels the pressure to perform well in each game. The ability to relax under pressure is fundamental to the performance process. Relaxation permits a player to bring his physical, mental and emotional processes under control. In order for a player to control his level of arousal, focus and refocus his attention, and deal with the pregame anxiety he must be able to relax. Relaxation is a process that involves both the mind and the body. Relaxation is the reduction of tension from the mind and the body. However, it is an acquired skill that must be learned, practised and implemented both in practice and competition.

According to Syer & Connolly (1984), relaxation is a temporary and deliberate withdrawal from activity which, if correctly timed, allows a player to make full use of his physical, mental and emotional energy. In this study players came to the rink as

much as four hours before the start time and many identified a period of relaxation early in the arrival phase. As one player commented:

> ...just trying to relax and ah, not thinking too much because I find when you start worrying about it too much, that's when you get yourself into trouble so I just ah, before I do stretching. I just relax on my own, then put on my equipment and go out and play.

For some of the players relaxation was done alone in a quiet place, usually away from the dressing room, for example, on the bench. Relaxation was a skill they had practised and made a conscious effort to perform before each game. In contrast, other players found it easier to relax while performing some activity or while joking around with other team members. For example:

> Relax and then just you know, relax sit around in the lounge with all the guys and talk an then ah, the closer game time comes the more serious you're getting. But you're always thinking about the game in the back of your mind.

When asked to describe what they meant by the term 'relaxing', players frequently made comments such as, 'doing nothing' or 'thinking about other things.' None of the players interviewed discussed any formalized techniques such as breath control or conscious release of muscle tension. Several players described the act of taping sticks, done during the arrival phase, as a time of relaxation.

After interviewing the first three players it became evident that an integral part of every players' preparation involved the careful selection and preparation of sticks. Taping sticks was an intricate part of the preparation where players needed to feel good about their equipment. Expressed in another way the sticks had to feel comfortable in their hands. In professional hockey the stick serves numerous functions. These include; moving the puck across the ice, stopping the puck, defending oneself or even

"interferring" another player. The stick becomes an extension of the player's body, a part of him, and for some players it is not just an object. Rather it has life! As one player pointed out, "I talk to it, it has goals in it."

Sticks were delivered to the dressing room in cases of twelve per player, and stored in each players stick rack. Players were responsible for the preparation of their own sticks for all practices and games. While physically cutting the sticks down to the correct height, shaving the blade, and taping the nob and blade, players began to think about the game. At this time, verbal interaction between players, usually about the upcoming game, occurred and more importantly, like the highly skilled craftsman, players were feeling the stick between their hands so that it felt comfortable and ready for use in the game. One player stated:

> ...sticks are very important if you don't have a stick that's quite close to what you're used to using it can be quite devastating.

Despite the fact that players had plenty of time to prepare their sticks on the morning of the game, they repeatedly stated that stick preparation always took place at the rink during the arrival phase and never beforehand. For example:

> No, no, we do all the sticks at the rink never before. I spend a lot of time on my sticks then.

> I never do it in the morning 'cos, I feel like when I do it just before the game, it's kind of feeling what you've got to play with. You know, what kind of feeling you've got in your hand.

Shortly after arriving at the rink the players go to the stick room and spend up to forty minutes preparing on average, three sticks for the game. Most players insisted that three was a good number in case one broke during a game ensuring there were always two in reserve. The researcher observed players changing their sticks during

the on-ice warm-up phase. Several players explained how important it was that their sticks felt comfortable:

> I prepare my sticks, cut em off, shave em down, tape em up, whatever one feels the best, or it feels light.

> I'm very particular about how my sticks should feel, so I don't go off the ice until I'm feeling good about it.

> ...one that felt great, felt like it had a lot of goals in it. I always like to go by how it felt and how it worked in warm-up. Some days it works super and other days it doesn't feel good.

During the off-ice adjustment phase the players had a chance to cut off or retape their sticks. Some of the players interviewed always retaped one stick at this time to keep them occupied during the twenty minute wait. Precise descriptions were often given to describe the type of tape used and the accuracy with which it was applied.

> Everyone has their own way of taping their nob or handle always with black tape, always sixteen times, it feels right that way.

> I would check my stick again and if it wasn't good for the warm-up I had to shave it down a bit again or maybe cut off the length...I always like to start with a fresh, freshly taped stick, if it held up good in warm-up that was fine but if, if it was starting to rip off I would tape it again.

Sticks were not the only pieces of equipment that players paid detailed attention to while preparing for the game. They reported a need to get a feel for their protective equipment while dressing. Frequently players referred to the precise ordering that they would follow while putting it on. References to putting on equipment on the left hand side first, the lower body before the upper body and leaving the skates undone until one minute before the on-ice warm-up were common. While physically getting dressed the

players were quite deliberate in the order that the equipment was donned and always feeling positive as a result. For example:

> Every time myself putting on my elbow pad the left way I feel that every time I do that, that I'll feel good and go out and feel good on the ice.

In hockey, players spend most of their time preparing equipment off the ice. With only twenty minutes on the ice to warm up many players discussed the importance of getting into a rhythm or a tempo. Two of the veteran players expressed:

> I just try to get my tempo on the warm-up 'cos that's the most important part for you. That's the only thing you're going to have a chance to really prepare yourself physically and mentally. You just try to do the right thing, the right drill, the right passes, so you feel right.

> I like to get the feel like if you're using a new stick, or something like that to get the feel of a new stick and just make sure you're nice and loose and limber, you've got your legs and mind into it, making good passes and make sure your shots are on the net.

Getting a feel for the ice and the boards was another concern the players had to deal with particularly at away games. If players were comfortable with their physical surroundings they felt more positive and confident. Each venue is unique in terms of size, temperature, lighting, type of ice, shape of the rink, location of dressing rooms, type of crowd, smells and sounds. Although players had an opportunity to test the ice, rebounds of the puck from the boards, and angles of shots on the net in the pregame skate earlier in the day, the on-ice warm-up was crucial at away games. One player described his concerns at an unfamiliar venue:

> When you're away from home you have more things to prepare for because you're in a strange arena. You have to try to think about how the boards are going to react when you run into them with your body. Every stadium has boards that are stiffer...you have to shoot the puck

> against the boards from different places to find out how the puck bounces off the boards and shoot it around the boards to see where it goes. You know the ice could be heavier or stickier, like it's a bit harder so you have to be out there to get used to the different surroundings.

The team ritual prepares the players both physically and psychologically before the start of the game. Because each individual player skates in a certain direction and taps certain players, it is important that they fit in with each other because space and time are limited. As the hockey season progressed and more players were injured or traded to other teams, so the ritual evolved. From interviews with rookies and observations taken, it was apparent that newcomers carefully observed the established code of behaviors of the veteran players. However, the team ritual allowed for individual variances and after taking observations, new players were able to fit in to the set ritual and feel part of the team. Two rookies explained:

> I just, I just do my own thing. Do something that wouldn't interrupt with what everyone else was doing and just sort of fit in and do my own thing so it feels comfortable.

> ...referee will blow the whistle and then a guy will skate a little quicker and then just stop and everyone it's almost like everyone knows when to kind of come in [to the net] and leave, so you just learn.

The ritual is also the final chance players have before the game to test out the adjustments made to their equipment. It is essential that it feels comfortable as there is no opportunity to make drastic changes to equipment although a stick may be exchanged quickly at the bench. If the equipment feels good, the player feels positive and thus confident that he can perform well. One player described the importance of having comfortable skates:

> ...so that I feel comfortable, that I feel comfortable to start the game, so by that I mean my skates, my edges are alright. You know there's always the chance in warm-up that you lose an edge walking to the dressing room. You can occasionally step on a stone or something and you lose a bit of an edge. My skates are really important to me you know.

The players interviewed in this study used the terms 'getting a feel' and 'being comfortable' when referring to a combination of their physiological and psychological preparation.

**Getting the Mind Ready**

The third component 'Getting the mind ready' refers to the psychological strategies that players utilized while preparing for the game. These included visualization, focusing attention, positive thinking, and self-talk. Hockey is an open skilled sport that is fast, physical and demands total concentration as well as split second reactions. The success of a player at the professional level requires him to acquire certain psychological skills that, when applied, enable him to deal with the pressure of competition. A player must make quick decisions, block out distractions, focus and refocus, control his arousal level or effectively mentally rehearse the skills in his mind.

Players must learn to increase their awareness of task-relevant stimuli and decrease their awareness of non-task-relevant stimuli. Non-task-relevant stimuli are objects, events or people that are unrelated to performance. Spectators, the lights in the rink, or music though stimuli that may capture the player's attention, are not relevant to performance itself. For example, when a player skates on to the ice prior to the start of the game he is confronted with a myriad of stimuli that compete for his attention. The type of crowd, either the hostile spectators at away games or friends and family in the supportive home crowd, and the noise level are just a few of the audience effects.

Unless he has learned to focus totally on the task that confronts him, many of the non-relevant stimuli, especially the distracting ones, will take over his attention. Players must have the skills that will enable them to focus their attention to task-relevant stimuli.

Such mental abilities are not inherited or natural to a player. Like physical abilities they must be learned, practised and then used under pressure. It takes time to acquire these mental skills if they are to be used effectively. Ideally, players should practise mental skills at home, during practice sessions, and sometime during the three hours leading up to game time.

Arriving at the rink three hours before the game begins gives a player ample time to prepare himself physically. However, it also allows the player time to be distracted from the game or to be aroused too early so that by game time he is flat or physically and mentally drained. One of the veteran players in the study commented:

> ...when I pull into the parking lot and enter the building I almost feel the adrenalin starting to build and so sometimes after, in the earlier years I didn't try to suppress that because it was fun to live off that. But later on as I learned to control a little more I'd try to suppress it, you know, at 4.30p.m it's a little early to have the adrenalin going for a 7.30p.m game. As I'd start stretching say maybe an hour before heading out on the ice for the warm-up then I'd start to let it build and sort of play with it, get pumped up type of thing.

Developing emotional and attentional control was an important part of the player's preparation. One veteran player learned to monitor and control his emotions using relaxation techniques early in the arrival phase. He stressed that this came with experience and practice over the years. Four of the players referred to "keeping an even keel" before each game. When asked what was meant by this, the players explained that they tried to control their emotions and attention before the game.

What was the optimal amount of time for players to arrive at the rink? For the players interviewed several factors seemingly influenced this decision. These included; ensuring therapy time was sufficient to treat injuries, consideration of media commitments for pre-recorded interviews, special duties or responsibilities that had to be performed for example, setting up the music in the dressing room and allowing enough time to prepare equipment. Some players expressed the opinion that arriving early at the rink built camaraderie among the team members. Players would spend time joking around, playing ping-pong or perusing through the statistics of the opposing team. One player summed up how he felt about the hours spent before the game:

> ...you're usually bullshiting or talking to someone. In the mean time if you really wanted to get done you'd probably get it all done in an hour, but it's the camaraderie of everyone being together you know the whole time, spending time with the guys and getting to know them a little better 'cos you have all those hours at the rink.

This player continued to explain that he enjoyed spending time at the rink and always arrived to the games early so that he could see and speak to players as they arrived for the game, and in his preoccupation with this he felt that the time passed quickly. After players spent time joking around and talking about events other than hockey many would then proceed to do some visualization on their own.

Visualization, a mental skill practised in some form by many athletes, is a method of emotional and attentional control. It is a process where a player sees himself on a screen or in his mind's eye, consciously evoking and guiding thoughts in which he appears toward a specific end (Alderman, 1988). For example, stopping the puck from going into the net. One player explained the process he went through and why he visualized:

> About 6.15p.m the time where you usually just sit in your stall and you're not doing too much besides thinking about what you're going to do, going through different situations that you might come across during the game and you want to prepare before, so when they do happen in the game you react instinctively. Visualizing, so you know, you just go through all the different situations you might come across in the game that day so you can be prepared for it and so nothing is a surprise...everything runs smoothly and always so positively.

Every player who discussed visualization stressed that he would only visualize positive aspects of the game, for example, good passes or saves. Many players mentioned that they had learned how to visualize to some degree before joining the professional team. Some players described visualization as, 'seeing myself score a goal.' Other players were more vivid in their descriptions of the atmosphere, the sounds, smells and the details of the scenes they visualized were very accurate. A few players stressed that they needed to isolate themselves from other players in order to visualize effectively. Despite the large number of players and the limitations of the dressing room, players would disperse to a quiet space either in the dressing room, weight room or out near the rink.

Five of the players interviewed deliberately came to the rink as late as possible before game time as they felt a lack of control over the external stimuli which interfered with their mental preparation. One of the players explained that he visualized at different times throughout the day:

> I do visualization at home the night before a game, then at home that day, alone. It's a good time to do it by yourself, alone, when there's nobody around. Then after I've done my sticks I visualize again alone in my stall when no ones around, but it's harder, then I always stretch.

The dressing phase began at 6.30p.m when the atmosphere in the dressing room changed. The upbeat music was turned off, players moved to their stalls and

equipment was put on. Players began to focus their attention on the game and distractions, such as, ping-pong were removed by the players. Players referred to the dressing phase as a 'quiet time', when the joking around ceased and concentration was required. The veteran players and captains would discuss the game strategy for that evening. One of the players described the scene:

> At 6.30p.m, twenty minutes before we go out on the ice, the stereo goes off...at that point every one's in their stall and you start discussing game strategy, you know, what we're going to want to accomplish that night, just reminding ourselves of a lot of the things the coaches might want to implement that night.

Repeatedly players commented that the atmosphere during the dressing phase was not intense, that the momentum was building and that the countdown had begun. At this time few overt emotions were displayed, players were quietly concentrating on the game to be played that night. The players then left the dressing room for the on-ice warm-up which was not a time of pressure and errors could be made that would not effect the outcome of the game. While on the ice for the warm-up the players displayed more emotions, as reflected in an overt display of excitement as they communicated with each other, talking as they skated past and occasionally tapping each other on the pads. One player described how his mood changed over time:

> When you go out for warm-up you've got no pressure on you, you're just going out there to get ready. When you go out for the game then that's when the pressures on and you got to be focused, ready to play. So there's definitely a different mode that builds closer to the game.

Although the emphasise in the warm-up was on the physiological preparation, psychologically players were trying to build their confidence while on the ice. Good passes, accurate shots on goal, and sharp turns were a few of the skills players

attempted to fine tune. If these physical skills were executed with precision the player felt confident and ready to begin play. According to one player:

> The last couple of shots that I'll feel good about myself and try to go to the top corner or make sure I'm trying to score, to get me into the game.

Interestingly, players would remain on the ice until they felt confident in their shooting skills. From observations made by the researcher during this phase, it was apparent that players remained on the ice until their last shot went into the net. This was validated in subsequent interviews with the players. This created some conflict as the starting goaltender also had to save the last shot to feel confident before leaving the ice. Therefore, the players used the backup goaltender to score their last shots in goal before returning to the dressing room. Once the backup goaltender had left the ice the remaining players shot goals into an empty net. When asked if it was important to save the last shot in the on-ice warm-up, one of the goaltenders commented:

> Yeah, oh, yeah that's always, I think everybody's that way, you never want to leave the net being scored on.

A player can leave the ice feeling negative and lacking confidence in his abilities. The on-ice warm-up may not always go according to plan. A player may have experienced equipment problems, or he may be feeling physically fatigued, or distracted by the crowd, or very nervous about the game. As one player described it:

> Sometimes warm-up will go better than others and you feel pretty confident and other times when the warm up doesn't go well you've got to try not to worry about it and just start you know, to talk to yourself to get ready for the game. When you're on a roll everything comes easy...it's when you're struggling that it gets a lot tougher and you might have to talk to yourself a bit more.

If the warm-up did not go as planned for the player, he still tried to stay positive and feel confident. One technique frequently used was affirmations or positive self-talk. Players needed to feel good and think positively before the start of each game. A few of the players said that if they had negative thoughts or were discouraged they would probably perform below their true potential. To think positively before each game requires practice because it is a difficult skill to acquire and execute especially when under pressure. One rookie described how he felt during the off-ice adjustment phase:

> I have to overcome, basically tell myself, 'relax you can do it, relax you know this, you can play at this level, just play your game' It's a lot of mind over yourself I guess, just to be calm, you talk to yourself a lot. You know like inside you're telling yourself what you have to do and that you can.

One of the veteran players in the study felt that confidence was extremely important to his performance and compared his performance highs and lows during the hockey season to peaks and valleys. He explained how self-talk can be used to get out, and stay out of the valleys:

> When you're on a roll everything comes easy, you put very little thought into the game. It's when you're struggling that it gets a lot tougher and you know you might have to talk to yourself a bit more to try and get yourself out of it.

Self-talk was only one form of reinforcement that occurred during the off-ice adjustment phase. The recognized leaders of the team, motivated themselves and the other players. The category "supportive activity" emerged early in the data collection and analysis and included behaviors or interactions between players where concern, tolerance or respect was displayed toward other players. Although hockey is a team sport the majority of the preparation is done on an individual basis. Players tolerate

each others' behaviors and acknowledge that they need to prepare individually. Even the descriptions of events given by the players during the off-ice adjustments phase were very individual. For example:

> Players are different you know, they might get up and go to a different area of another room just to be quiet, ...some people like to stay loose, they might go talk to the trainers...usually the coach will give a couple of minutes talk on something, a few things he wants to see tonight.

> Up to now we remain pretty relaxed, now it's pretty focused on the game, it's really focused on reiterating what we discussed while we were dressing. Talk about who to watch out for, the importance of the game, everyone's got to dig deep, so there's talk.

As the interviewing continued it became apparent that the players were not only aware of the role of the captains during the pregame preparations, but also had expectations of them during the on-ice warm-up. One player referred to one of the captains as, "the head chief out there." During the on-ice warm-up the captain led the drills and this was communicated through his movements. The captains also played an important role during the off-ice adjustment phase in motivating the team. One of the quieter rookies commented that the captain's had a positive effect:

> I don't talk a lot myself, I'm just not a vocal person but it's nice when you do have guys talking because it gets a lot of you know, positive feelings going through the guys.

When the researcher interviewed one of the leaders about his role at this time, he made an interesting comment:

> Some players remain quiet, don't have very much to say. The more vocal ones like myself feel that there's many nights when I just feel like not saying anything but I feel it's my responsibility as someone who players have become accustomed to hearing. If all of a sudden I just shut up then there'd be obviously something wrong.

One of the role obligations of the captains included motivating team members for every game. This process appeared physically and mentally draining at times. However, the captains were cognizant of the fact that the other players and the coaches expected them to perform this task in preparing for the game.

As the clock in the dressing room ticks down, the players begin to leave the dressing room. They are physically prepared, focused, feeling positive, motivated and excited. As they skate onto the ice the crowd makes it's presence and loyalties known. The players are excited, the adrenalin is pumping and they try to remain focused, blocking out distractions, thinking only of the game about to commence. The team ritual is the final act before players head to the bench or the blue line. The ritual motivates players, helps them focus and adds to team cohesion, giving players a sense of uniformity and identity.

Minimal team group preparation has taken place in the preceding three hours. With two minutes to game time, the referee blows his whistle and the players skate in various directions, usually around the net and along the blue line. Some players stand still in a certain spot, others choose to avoid what appears to be, the 'organized chaos'. Many players skate towards the goalie to tap him on the pads and wish him luck for the game. Some players skate past their friends occasionally tapping them or often giving words of encouragement. Many players feel that there is both verbal and non-verbal communication going on during this time, but that it is not necessarily emotional. Feelings towards each other are not expressed at this time:

> You don't really sense any emotions during it, it's just a tap.

> Gets you better prepared for the game, you give the goalie a tap then you give someone else a tap and you know you talk a little bit to get up for the game.

> Usually you all go down there [to the net] and you'll tap the goalie on the pads, wish 'em good luck and tap other players and say "lets have a good game."

> I'm trying to say good luck to pretty much everybody, not just the goalie 'cos we're a team, everybody's got to do their job so everybody kind of, I mean encourage everybody.

As the ritual ends the players aim to be in an ideal performance state, as they must be immediately ready to perform to their potential. Distractions have been blocked out, the player is concentrating, focused, aroused and motivated. Physiologically and psychologically he is ready to perform. The three hour pregame preparation is now over.

In combination, the three essential components, (getting the body ready, getting a feel, and getting the mind ready), are the core of the players' preparation. Some of the players found the physiological preparation easier and as the season progressed they found the mental preparation more difficult. The team ritual enabled the players to get the body ready, to get the mind ready, and to get a feel. The ritual will now be discussed in more detail.

**The Team Ritual**

The final phase in each players' preparation is the team ritual. The entire hockey team returns to the ice two minutes before the start of play. This is the last time every player is on the ice during the first period. Two minutes before the game begins the referee blows his whistle to remind the players the game is about to commence. Upon hearing this signal the players skate in and tap or verbally encourage team members and the goaltender who stands at the net.

From observations of the team ritual and interviews with the players, the researcher recorded the evolution of the team ritual during the 1991-1992 regular

playing season. A greater understanding of its purpose, structure, and meaning from the players' perspective was sought. Three categories emerged from the data, these include; player status, supportive activity, and behaving consistently. These categories will be discussed separately as they relate to the ritual.

***Player Status***

Player status was divided into three groups: (a) rookies and veterans, (b) positional, and (c) elite. In professional hockey, players are categorized as rookies or veterans. For the purpose of this study players classified rookies as, "any player in his first year in the N.H.L." All other players were considered to be veterans, although the more experienced the player in terms of years played in the N.H.L the more seasoned he was considered to be. This often led to added responsibilities, for example, leading the warm-up.

During the pregame ritual the veterans assumed their positions, skated in their set pattern and tapped their fellow veteran players. At the start of the season the rookies observed the behaviors and often did not involve themselves in the team ritual. Later, when the final roster was selected and the early season trades were made, the rookies became involved. One of the rookies described how he felt during the preseason exhibition games at this time:

> If someone like _____, was standing then I probably wouldn't, [stand there] but because no one does it here yet I'll go stand there. But if it was_____, standing there I'd see if there was another person on the other side of the net or maybe just go in and be like one of the guys. Just come in and skate and tap a guy on the pads you know, kind of a pecking order I guess, put in your time to get that spot.

Other players mentioned this pecking order and said they found it difficult coming from a lower level of hockey where they were the best players and had secured

their place in the ritual, to a higher level where they had to show respect and fit in with the pre-established pattern of behavior. Two of the rookies interviewed expressed a desire to fit in with the team ritual rather than exclude themselves and stand out. One of these players said:

> I'd rather just be caught in the middle you know, and kind of not be seen. Just kind of mix into the crowd and then come out, part of the crowd.

The second classification of player status identified was positional. Every player interviewed said that the team ritual was done to give the goaltender support. Interestingly, many of the players felt that the goaltender had the hardest job during the game. When questioned about this in the second series of interviews, players clarified what they meant. The goaltender was under more pressure during the game because the scoreboard was seen to reflect his performance more than that of the other players:

> He's the guy who can change the game the most I think, the big saver, ...he's your most important guy really, when you think about it so everybody wants to make sure he's ready, hoping to hell he is ready.

> You'd pat other guys but you hit the goalie, 'cos he's in there, it's just a ritual. He's your goalie and your backing him up.

> It's the most important position. In a game if a forward or defenceman screws up it's o.k but if a goalie screws up you end up getting a goal on you.

If a goaltender remains uninjured and is playing well, he is the only player who stays on the ice for the entire game. When interviewed, the goaltenders said that at times, this was mentally draining. It was difficult to stay focused and block out the distractions especially when playing a weaker team. Other players were also aware of this:

> He's by himself out there for the rest of the game, so I tap him, try and cheer him on sort of thing.

The third classification of player status to emerge was the group of elite players, comprising of five veterans. When the referee blew the whistle these players skated to their designated locations on the ice. Many of the other players included these elite players in their ritual, tapping them as they skated past in a set order. Two of the veterans described the scene:

> The older players who've been around, established, there's five of them who kind of stand there and the rest of the players just skate around.

> Our guys it's so systematic with a lot, especially our last few guys who do their own little thing. So I know what order it's coming in, it's pretty well the same order every time, especially the last five guys.

During one of the games the researcher observed the ritual where one of the members of the elite group was injured. No one stood in his place, however, the players who usually tapped him continued to tap the place where he would normally be standing. Players, particularly the goaltenders, said they were aware of any players who were absent from the ritual due to an injury.

***Supportive Activity***

Hockey is a team sport requiring the coordination and speed of six players on the ice at one time. Each player contributes offensively and defensively to the play. Supportive activity was another main category that emerged, particularly when players discussed the team ritual. The actions used and the words spoken during the ritual were aimed to build confidence, encourage and motivate team members, especially the goaltender. Each player interviewed was asked "Why do you do the ritual?" The responses to this question are shown in Table 4.

Table 4: *Functions of the Team Ritual*

| | |
|---|---|
| TEAM COHESION | 1. To fit in with the rest of the team.<br>2. To achieve a sense of togetherness.<br>3. To motivate other players.<br>4. To wish everyone good luck.<br>5. To support the goaltender. |
| EXPECTANCY AND CONSISTENCY | 1. To maintain consistency.<br>2. To have a good game.<br>3. To uphold hockey tradition. |
| COUNTDOWN | 1. To remain occupied before the game.<br>2. To signal the start of play.<br>3. To stay focused and block distractions. |
| EQUIPMENT | 1. To ensure equipment feels comfortable. |

The first five reasons listed, suggest the notion of team cohesiveness. Until the team ritual, each player has prepared individually for the game. Now on the ice for the last time together they have an opportunity to unite as a team. Some of the players described their feelings at this time:

> Camaraderie, keeping everyone involved in each other you know, getting everybody closer.

> There's a sense of togetherness, a team...you're together, so you go through a lot. So you're going to wish everyone well, that's how a team is supposed to work.

> Team togetherness is a big one, we're not just patting the goalie, everyone's patting each other too.

> ...the ritual the guys do before the game just to bring the guys together mentally, just "o.k we all do our thing and we're ready. That's why we're ready, because we do our thing.

Players were very supportive of each other during the ritual. Players respected each others idiosyncratic tendencies and tolerated behaviors that may have appeared unusual. One of the goaltenders stated that he was in the ritual for the sake of the other players; he just stood there and let them do their thing:

> Everybody has their own thing that they like to do and you just stand there wait till their all done. A lot of things involve you so you just go with it, ...some have their little things they like to do, most just tap you on the pads.

Several players emphasized that the team ritual was not directly related to the game of hockey. After further interviews the researcher found that players were referring to the physical skills used during the game and that the ritual was primarily to activate the team before the game. One veteran said:

> This ritual has nothing to do with hockey at all. I mean it's just a little camaraderie before the game, sort of to get everyone going, pumped, slap on the pads, pat on the back, whatever you do.

***Behaving Consistently***

Throughout the precompetitive preparations players attempted to behave with as much consistency as possible. Individual routines and rituals were established in order to prepare for each game as smoothly as possible, with a minimum of fuss or thought. Behaviors were consistent in terms of time, space and order. During the ritual these three factors were highlighted. The team ritual appeared repetitive, sequential and organized. Players waited for the signal from the referee before moving into position and then took their turn tapping the goaltender or other players before leaving the ice. As each individual contributed to the ritual in his own way, in its entirety it became a team act.

The team's ritual may change or be altered during the season. This may happen if players are traded or if the team are on a losing streak. If a player or the team had a successful performance the ritual would remain unchanged. For example, two veterans commented:

> You do the things that got you here and you stay with them.

> If I find a ritual that's comfortable with me and I have success with it then I stick with it.

With the players ritual comes a degree or level of expectancy. Several of the players in this study commented that they would repeat a behavior if they had success. If they did it once and it "worked" they would do it again. As one player said:

> I did it once, it worked yeah, I played really well so I keep doing it.

Once a player had found a suitable ritual he often used reference points on the ice to direct his movements. The net, the red or blue line, other players and even dots within the faceoff circle served as starting or finishing points. Three of the veteran players reminisced about when their rituals first started and how the same behaviors had continued over the years despite the departure of old team mates to other teams. One of these players reflected:

> When_____used to play he used to stand on the dot and I used to pat him on the pads. Now I just hit the dot, I always hit the dot where he used to be, he was my partner in my first year so I always, no one stands there now so I just tap like there was someone there...I don't think of him I just sort of do it.

At away games players were particularly aware of the space on the ice. The team ritual was performed using each other and the rink as reference points. This added to the consistency of behaviors leading up to the game thus aiding players in focusing their attention and blocking out unfamiliar and distracting stimuli.

Due to space and time constraints on the ice during the ritual, players proceeded to the net in a predetermined order. To the onlooker the ritual appeared very complex, but for the players it occurred with speed and ease. As one player said:

> It looks complicated but it's easy, one guy goes, the next guy goes, this guy goes, then it's my turn, I go, then some guy goes behind after me.

Time, space, and order were important components of the team ritual. In combination, timing, spacing, and sequencing led to consistent behavior. Players felt comfortable when everything went smoothly in the precompetitive preparations. With players supporting each other, respecting and tolerating each others behaviors, the ritual was performed with ease. The ritual served to unite the team in the final phase of the long preparation period.

Behaving consistently was not only important during the team ritual but during the entire process of preparation. Players distinguished between the team ritual and their own individual routines. Players had a level of expectancy attached to the ritual, and if they felt it "worked" or contributed in some way to their success, it was potent. Although similar to rituals, routines were repetitive and sequential, and they lacked this special innate power that the ritual obviously possesses.

Being a successful professional hockey player means playing with consistency throughout the season. Statisticians constantly critique the players and publish figures relating to performances. Players earn a living, often a very lucrative one, from their sport. However, for many players, with the salary comes uncertainty. Players can be traded to any other team in the N.H.L. or sent down to the farm team, if the move is beneficial to the team. The players have become commodities to be bought and sold by the management of their affiliated team, and rarely does a player expect to spend his entire career in any one city.

The 1991-1992 regular hockey season was seven months long. During this period players were released from their clubs to play in special tournaments if selected. Special tournaments included the Canada Cup, games against the Canadian Olympic team, and the All-star game played mid season. Once the best players were chosen, they came together for the game or tournament and were expected to perform as a coordinated team. Preparing in an unfamiliar environment with new players was difficult and distracting for some of the players interviewed.

A strategy that many of the players in this study used to overcome these problems was the adherence to strict routines. Two levels of routine emerged from the data; macroroutines and microroutines. These will be discussed separately.

**Macroroutines**

Macroroutines begin the day before each competitive game and continue until the game is over. A macroroutine is a behavior or series of behaviors that are performed at the same time, location, and order prior to each game. Players identified thirteen macroroutines they went through before every game. Players stressed the importance in the ordering that these occurred especially for home games. (See Appendix A for a list of the thirteen macroroutines).

Each player attempted to achieve his ideal performance state before the game. Players commented that everything had to go as smoothly as possible and it was their responsibility to ensure they were ready. Compliance to individual macroroutines was evident. One veteran explained the importance of having individual macroroutines:

> ...you want to have a routine that you follow so you're not surprised by anything. You're not, your emotions are on an even keel and you're not getting all worried about something surprising you. You want to do the same things...I like following a routine a lot better and when everything is clicking it almost builds confidence. You know you're doing a lot of the same things and you know you're getting closer to game time and you're gaining momentum.

Frequently players said that they had to prepare individually because they could not depend on anyone else as part of their routine because players were injured, traded or benched without warning. If they had formalized macroroutines they felt more confident in their preparation for each game. For example:

> Everybody has their own routine so it's pretty hard there's not much you do as a team, you can't rely on the same guy all the time.

> ...you all rely on each other to be ready on your own, you can't depend on other people.

**Microroutines**

As a player becomes more experienced his microroutines develop. A microroutine is similar to a macroroutine but it is more refined and structured. A player's macroroutine of driving to the rink may involve a microroutine that maps out the time he leaves the house and the exact route he likes to take to get to the rink. Several of the players interviewed explained in detail their microroutines. For example, one veteran's microroutine for the on-ice warm-up was:

1. Skate two loops around the net anti-clockwise.
2. Stretch on home boards.
3. Do drills directed by captain.
4. Leaves the ice last.

Two of the veteran players who had a lot of experience playing in special tournaments stressed the importance of having microroutines. They described them as, "something a player had to direct precompetitive preparations wherever he was playing." The players' behaviors were more consistent before each game. This had implications for the away games where the player's macroroutines, for example, the drive to the rink, were often disrupted due to travel changes and pregame team meals.

Some of the players felt that their microroutines had psychological benefits. Players used their time effectively, focusing on the task at hand rather than sitting around watching the clock or joking with other players for longer than they felt was necessary. Microroutines were repetitive and became automatic behaviors thus ensuring that preparation was thorough and complete. Two players explained:

> I've got everything set out, it's a basic routine and it just follows right though to game time so I'm very rarely distracted. The only time that I'd ever maybe daydream if at all would be while I'm stretching, you

> know go into a little bit of a daze and stuff but that's, everything else is basically all done in stages, very, very routine.
>
> ...I don't like to sit around and do nothing. I'm, I get bored with that, you know. I like to do everything in stages it keeps you busy right on through.

It became obvious to the researcher that all of the players interviewed had macroroutines, but few rookies had any set microroutines in their preparation for each game. This was apparent in the tentative language used to describe phases in their preparation for the game. Below is an example of a rookie's description of the arrival phase:

> Usually I arrive two and a half hours before the game, sometimes it varies, it varies all the time what I do. Depends fairly on what kind of mood I'm in...sometimes I'll sit there and shoot the breeze with the boys, get ready it's usually to calm my nerves or something.

The degree to which microroutines were implemented by the players in this study varied greatly, both in terms of the amount of experience and the personality of the player. Quieter players spent less preparation time relating to other players, preferring to focus on their own microroutines.

**Role of the Coaches**

In this study the coaching staff consisted of a head coach and two assistant coaches. According to the players some of their duties included; organizing and running practice sessions, deciding on game strategies, selecting player rosters and lineups for each game, communicating with the players regarding performance feedback, liaising with the captains, and ensuring the team was ready for each game.

Hockey is a team sport combining twenty two or three individuals for each game. When the players were asked what the coaches did during the five phases of preparation, the responses indicated that the coaches provided input during the pregame

skate and the team meeting on the morning of the game, but a minimal amount as game time approached. Repeatedly players responded to this question in a similar fashion:

> Coaches do their own thing, I mean they have to do their own thing to get themselves prepared and do their job. I think it, you all rely on other people to be ready on your own, you can't depend on other people. The coaches run us through the morning skate so I guess they're helping us then but once you get to the rink then they don't do too much talking accept for before we go on the ice.

> They don't, well we don't well, we might see the coaches walking around a little bit but most times we don't see them till about maybe 5-10 minutes before we go out to warm up.

> ...Coaches don't play a big role they, we do a lot of our talking in you know during the pregame morning skate.

As previously mentioned the coaches have their own room attached to the main dressing room and according to the players this is where they spend most of their time during precompetitive preparation. The player's accounts of what the coaches were actually doing during this time varied. When asked what the coaches were doing during the dressing phase one veteran replied "they're having dinner" and laughed. Some of the players said that the coaches spent their time watching other N.H.L. games being played in other parts of the country on the same night. One player explained:

> ...a lot of times now since satellite has come into play they'll have watched a couple of periods of the game in the east, they're two hours ahead. Preferably a team that's coming in here in a week or so and they'll advance scout them, they'll just watch the game and make observations.

It appeared that the coaches were focusing on the upcoming games as well as the game being played that evening. Players said that the coaches would sometimes call

individual players or a line of players to watch a video and give some technical or tactical instructions.

> ...they'll pull a line in and say 'we want to forecheck this way.'
>
> ...they'll bring guys in, you know one at a time and talk to them and say listen "you got to do this better or you know it will cost us a goal or you got to forecheck this way.

The players interviewed commented that the coaches came into the dressing room during the off-ice adjustment period to say a few words to the team. Usually the nature of the talk was tactical, explaining quickly the lineup of the opposing team, giving final instructions and naming the starting line up for the team to play that night. The players indicated that during this time the coaches did not give any pep-talk or motivational speech.

**Summary**

The process that the players in this study experienced in the hours leading up to each competitive game have been presented in this chapter. There were many commonalities in their experiences despite the obvious individual nature of their preparation. Interestingly, when asked if some players prepared better than others before a game all of the players interviewed were unanimous. The team ritual was a shared experience whereby players interacted with each other to bond as one group in their final minutes of preparation.

Five distinct time phases emerged from the data directing the players through the process of preparation. Each player had to prepare his mind and body during the five phases to ensure an ideal performance state was obtained before each game in order to perform to his potential. The dimensions 'getting the body ready', 'getting a feel' and 'getting the mind ready' were equally important in the game preparation.

However, it appeared that some of the players had more difficulty 'getting the mind ready' especially as the season progressed and they became more fatigued.

Differences in terms of experience led players to develop macroroutines and microroutines. These routines were individual in nature and enabled the players to prepare in a consistent and thorough manner. Having a set of microroutines had implications for playing on specially selected teams or at away venues. The concept of the player as a commodity was identified and the implications this had on the players preparations were highlighted.

Finally the role of the coach from the player's perspective indicated that the players were not dependent on the coaches in preparing for the game during the five phases. A minimal amount of input was provided by the coaching staff during this period and the onus was placed on the players themselves and on the captains to be prepared physiologically and psychologically for the game.

# V. DISCUSSION

The purpose of this study was to examine the experience of professional hockey players as they prepare for competitive games after arriving at the rink. A qualitative mode of inquiry was used since an analysis of research relating to precompetitive preparations in hockey failed to provide a clear understanding and description of this experience. The findings of this study indicate that the process of maximizing readiness is fundamental in precompetitive preparations. This process involved three components; getting the body ready, getting a feel, and getting the mind ready.

In this chapter, specific aspects of the study will be considered. First, issues related to the research method will be explored. Second, the findings of the study will be articulated. Finally, the implications of this study for athletes and coaches and recommendations for future studies will be discussed.

## Discussion of Research Method

### *The Sample*

Several factors affected the type and quality of data collected. First, the primary source of data was generated through interviews with professional male athletes. The purpose of interviewing is to gain another individual's perspective about an experience or phenomena (Patton, 1990). Interview data can be greatly affected by the emotional state of the interviewee at the time the interview takes place. In this study, players frequently experienced performance highs and lows during the season. Some of the second interviews took place during the team's loosing streak and the players were frustrated and hesitant to talk at length about aspects of their preparation.

Second, interviewing males can present problems related to self-disclosure. A study conducted by Balswick and Peek (1971), found that inexpressiveness is a culturally produced temperament trait characteristic of many American males. After

interviewing men and women these researchers reported that, in North America, masculinity is portrayed through physical courage, toughness, competitiveness and aggressiveness whereas feminity, in contrast, is expressed largely through gentleness, expressiveness and responsiveness. Balwick and Peek (1971) also found that males had difficulty expressing themselves emotionally to women because of the way society socialized them into their sex role. Players in this study may have found it difficult expressing their thoughts verbally, especially when disclosing information of a personal nature related to the team ritual.

After studying the patterns of self-disclosure among 62 male undergraduate students, Komarovsky (1974) found that the primary confidante was a female. There was higher disclosure to female than male friends or parents. However, it was also reported that those who belonged to a subculture such as an athletic group, tended to have equally high self-disclosure with males. These studies suggest that the players of the hockey subculture may have had difficulties in expressing themselves. The length of some of the interviews in the present study indicate that the interviewer (being a female) may have been a significant factor.

After several years of extensive research into the subculture of hockey players, Gallmeier states, "professional hockey players tend to lead a cloistered, ethnocentric existence and are extremely wary of outsiders" (1987, p. 229). The outsiders most familiar to the players were the media. Explaining to the players that this study was research and not a media story was a challenge because they often responded to questions with cliche answers.

***The female researcher***

Gaining access into a setting and establishing and maintaining rapport with members is a challenging task for any researcher. Being a female researcher observing

and interviewing male professional hockey players had both advantages and disadvantages.

One advantage to being a female in a male-dominated environment was being viewed by many of the players as non-threatening. Gurney (1985), makes the point that female researchers work hard trying to be non-threatening but at the same time competent, credible and professional. The players in the present study could talk to the researcher about personal experiences that "the guys" were not interested in hearing. As one player explains:

> Yeah, the guys we don't talk about what we do before the game to get ready you know you do it on your own like, they [other players] don't want to know... it's not the kind of thing we'd talk about really.

I conjectured that being a female researcher limited the control and access I had with regard to contacting the players. A male researcher may have been able to establish a greater rapport with players, talk his way into the dressing room and follow-up in person when players did not turn up for interviews. Like Gurney (1985), "forgotten" interviews and being given the "brush off" could have been related to (my) gender.

***Generalizability***

An investigation of this nature allows for theoretical generalizability. This particular type of generalizability refers to the applicability of aspects of the emergent theory to the experiences of other individuals. Theoretical generalizability is present when grounded theory has "fit" and "grab" (Glaser, 1978). These criteria mean that the theory must be well grounded in the data and that it must make sense to other people.

The data collection used in this study may have affected the criterion of "fit" since researcher biases may have influenced the responses of the players. The

utilization of theoretical sampling and the constant rechecking of responses ensured that the potential effects of the researcher were minimized as much as possible.

The criterion of "grab" was met through interviews with secondary informants. This sharing of information elicited responses such as, "yeah, that's what I go through," which indicated that the findings made sense and were relevant to other individuals.

Generalizability of the findings was not the goal of this study. No attempt was made to quantify any of the characteristics that were described since the sample size was limited to 15 professional hockey players. The purpose was to identify the process of and variation inherent in the experience of preparing for a competitive game, rather than to present information regarding the number of players who experience each response and to calculate statistical probabilities of outcomes.

## Discussion of Findings

### *The Five Phases of Preparation*

Initially the focus of this study was on the pregame ritual performed by the team during the final phase of preparation. As interviewing progressed, it became apparent that the ritual was just one important aspect of the players' experience of preparation. The events preceding the ritual were essential in understanding it's function and meaning to the players.

In all sports the interval between arriving at the competition site and starting the competition is crucial. In hockey this period can last from three to four hours during which time players are susceptible to the influence of minor events. Activities during this time should physically warm up athletes, control their emotions, and focus their thoughts on task-relevant factors (Tutko, 1976).

The five phases of preparation identified by the players were ordered and directed by time. Other team sports, for example football, require the players to follow a strict time frame in the hours leading up to the game. This ensures that the entire team is ready to compete by game time. For some of the players interviewed, the arrival at the rink was too early which allowed time for distractions. Music was mentioned by one of the players as a distraction; he prefered to listen to his own music at home.

During the preparation period music was used to influence and direct the emotions of the players. According to Schubert (1988) music can reinforce physical and psychological warm-ups by motivating and stimulating athletes before competition. Schubert suggests that when working to stabilize automatic or cyclical movements, for example skating, music which has the right tempo or rhythm can be very beneficial for athletes. Players in this study supported the idea that music, particularly during the on-ice warm-up, was important when they attempted to get their tempo going.

***Components of Preparation***

Owing to the inherent complexities in athletic performance, preparation for competition should be complete. In all professional sports preparation demands an athlete's physical, emotional and psychological readiness. Athletes need to be aware of their state of readiness, a term Suinn (1986) labels self-regulation. "It involves both that frame of mind of feeling good and up for competing as well as having bodily sensations that feel right" (Suinn, 1986, p. 25). Tutko (1976) refers to this same concept as self-scouting. Self-scouting helps to build athletes' self-awareness of their physiological, emotional and psychological state prior to competition. Experience appears to be a key factor affecting this self-awareness. The veteran hockey players in this study were aware of their physical needs before each game and allowed enough preparation time for injuries to be treated. After many years in professional hockey

they were also more aware of their emotional state and had learned to control or suppress certain feelings until closer to game time. It appears that the rookies self-scouting skills were not as refined as the veteran players which may have contributed to a lack of optimal readiness by game time.

All of the players in this study said they experienced some tension leading up to each game. Vanek and Cratty (1970), refer to this as "start tension." When athletes arrive at the venue, hours and minutes prior to competition, they experience additional stress and tension. Vanek and Cratty (1970) also suggest that a warm-up of some kind is essential to ease this physical, emotional and psychological tension. In the present study individual athletes used a variety of strategies such as, massage, stretching and relaxation to ease this stress and tension. To ensure the process of maximizing readiness is complete players need to become more aware of their physical, emotional and psychological needs through self-scouting and practise.

***Getting the Body Ready***

The competition among professional hockey players is severe. In comparison to other occupations a player's career is relatively short. Each player faces the ever present and very real danger of injury. An injury can result in a premature end to what may have been a promising career in the sport. For these reasons the players spend ample time getting their bodies ready for competition. The most common way of preparing the body for competition is through utilizing the warm-up.

Research indicates that by warming up, general heating of the body results in increased core and muscle temperatures facilitating performances and reducing the chance of injury (De Vries, 1980). Two types of warm-up that a player can engage in have been identified by exercise physiologists. First, a related warm-up, which includes any procedures that involve performing aspects of the athletic activity about to

be carried out. Second, an unrelated warm-up designed to bring about desired physiological changes without involving the actual movement itself (De Vries, 1980). As the findings indicate, the players engaged in both types of warm-up. The related warm-up occurred on the ice when players performed drills for example, shooting, passing and skating as they prepared for the game. The unrelated warm-up was performed on an individual basis and included stretching, playing ping-pong, riding stationary bicycles and doing weights.

It has been shown that optimal combinations of intensity and duration of the related warm-up are needed to bring about the desired effect. (Martin, Robinson, Weigman, & Aulick, 1975). Too little work does not achieve optimal levels of temperature, and too much warm-up can result in impaired performance due to fatigue (De Vries, 1980). Interestingly the players of larger stature in this study commented that the twenty minute on-ice warm-up was too short to prepare. From both interviews and observations, these players were often the last to leave the ice. As one player reported, he would sometimes stay on until the zambonee was on the ice.

In a recent study on the effects of warm-up decrement (WUD), Anshel (1991) found that participants who engaged in task specific movements prior to activity experienced more positive emotions than those who rested prior to play. WUD is "a loss in the level of physical performance following rest and prior to subsequent trials" (Anshel, 1991, p.47). In an earlier study by Anshel (1985), it was found that mental practice failed to reduce WUP. However, this could have been attributed to the subject's lack of correct imagery skills. In this study players sat in the dressing room after the warm-up for twenty minutes during which time WUD occurred. The team ritual was the players only opportunity to reduce WUD and consequently experience positive affect. Anshel (1991) also found significant positive correlations between

positive affect (emotions of a positive nature), and the reduction or elimination of WUD.

***Getting A Feel***

The process of preparation is not just a physical one. Instinctively, athletes use their preparation time to attune to themselves and their surroundings (Syer & Connolly, 1984). Psychologically athletes begin concentrating on the game but they also prepare emotionally by getting into an appropriate mood to compete.

The potential for mood to enhance performance was recognized in Zurcher's assertion that, "an interactionally derived, though rather privatized diffuse emotional state which, if appropriately cued can be channeled by the individual into very intense behavior" (1982, p. 6). Players in this study were influenced by other players, particularly the leaders and veterans, to get into the appropriate mood for the game. For example, during the dressing phase the players were expected to act seriously and the music was turned off. The dressing phase was a quiet time when they could focus on the game. Players did not display overt emotions for example, excitement, until the on-ice warm-up.

From the findings of this study it is apparent that the process of maximizing readiness involved an awareness of both ones' thoughts and feelings and its appropriateness for the game. Once the player was aware, he could consciously block out distractions that may have led to inferior performance. At "away games" the players tried to identify distracting peculiarities of the rink, attempting to get a feel for the ice and the arena in which they were about to compete. This finding supports Syer and Connolly's (1984) contention that becoming attuned to a place enables athletes to be less distracted and more at ease.

Being aware of thoughts and feelings before a game can be more difficult in team sports because there is pressure to interact with other players from the moment a player arrives. Repeatedly players stated that they used relaxation as a means of isolating themselves from other team members and as a means of promoting an awareness of body and mind. Tutko (1976) points out that relaxation is necessary to stop the emotional snowballing effect caused by negative emotions such as anxiety and anger (1976). Relaxation can stop and even reverse the snowballing effect because relaxation of the body has a calming effect on the mind which dispels anxieties.

An important process of maximizing readiness for the players was getting a feel for their equipment. They ensured that everything felt comfortable, emphasizing it most when they were on the ice. During this time, players skated around trying to feel the edges of their blades and handling the puck with their stick. This need of getting a feel for equipment was evident off ice as well. All of the players placed great importance on the preparation of their sticks. If a stick felt comfortable in their hands during the on-ice warm-up they felt positive about the game and consequently their confidence was boosted.

In summary, the findings of this study indicate that the players used self-reflection and self-scouting techniques to varying degrees, in order to become aware of their physiological, emotional and psychological state prior to each game. Getting a feel or getting attuned to their surroundings and equipment was essential if optimal readiness was to be achieved.

***Getting the Mind Ready***

The significance of the psychological dimension in individual and group behavior has recently been recognized in competitive sports. In professional sport, the players possess similar fitness levels, physical skills, and coaching and training

opportunities. Alderman (1988) suggests that at the elite level the difference between success and failure is psychological in nature. Players who succeed are those who are motivated, able to deal with pressure, and concentrate on the task at hand. Alderman (1988) suggests that psychological skill training programs (PSTP) should be a part of every athlete's preparation. A PSTP program should include teaching the athlete skills such as, focusing, refocusing, arousal control, visualization, relaxation, self talk, positive thinking, and goal setting.

The findings of this study indicated that the players used psychological skills to varied degrees and with varied success. Many of the players implemented visualization and self-talk strategies as a means of dealing with the stress experienced prior to the game. However, some of the players felt that their visualization techniques could be improved in order to become more effective during this period.

Visualization, if performed correctly, has been scientifically proven to improve an athlete's performance (Shelton and Mahoney, 1978; Lee, 1990). Each athletes' visualization techniques can vary greatly. Visualization can be very short, it can done at the venue or at home, with the eyes opened or closed, in isolation or guided by a leader. Porter and Foster (1990) state that in order "for the image to go deeply into the conscious and subconscious mind, it is essential the athlete be in a relaxed and receptive physical and mental state" (p. 23). All of the athletes in this study attempted to get into a relaxed state before starting visualization.

The players in this study commented that they used a variety of techniques throughout the five phases of preparation. A number of research studies have demonstrated that visualization combined with relaxation was more effective than visualization alone (Suinn, 1977; Weinberg, Seabourne & Jackson, 1981). In addition research has demonstrated the positive effects of self-talk for improving performance

(Rushall, 1984). Many of the players in the present study revealed that they relied on self-talk during the off-ice adjustment phase to build their confidence before the game. Self-talk was also used by the players to help them focus on the correct cues during their visualization.

***The Team Ritual***

Several definitions of ritual have been proposed in the literature but two distinct views are in evidence. First, there are those who believe ritual is potent. This group believes that rituals are powerful, either innately or in controlling supernatural beings or forces (Firth, 1973; Gluckman & Gluckman, 1977; Eitzen & Sage, 1978; Womack, 1979). Second, there are those who believe ritual is a performative act (Turner, 1967; Tambiah, 1981; Bloch, 1986). That is, a ritual is a formal action or series of repetitious actions that are dramatic, thus leading the participants into a liminal state.

Based on the descriptions and experiences of the players in this study neither of these definitions can be applied. However, several players acknowledged the potent aspect of the ritual with comments such as, "it works." When asked if they attached a belief to some external power all of the players responded negatively. Similarly, the second definition did not "fit" with the data collected. According to Tambiah (1981), for a ritual to be considered performative three criteria must be met. First, the ritual is formal and must be conventional, rigid and repetitious. Second, a ritual has indexical values whereby players are ranked hierarchically and the emphasis is on the location and duration of the ritual. Third, a ritual is dramatic, redundant and stereotyped thus affecting both the cognitions and the emotions of the participants.

The players indicated that the ritual was a formalized act in that the movements were repetitious and rigid. The ritual also exhibited indexical values with the elite group skating to their positions upon hearing the referees signal. However, based on

the findings, Tambiah's third criteria was not met. Redundancy refers to the repetitive actions and words used during the ritual while the rigid structure of the ritual relates to its stereotypy. However, these actions did not lead the players into some liminal state as Tambiah suggests (1981). Dunleavy and Miracle (1979) also describe this state as a paradigmatic shift whereby the player moves into a trance like state during the ritual. Players also insisted that during the ritual emotions were not displayed between each other.

The findings of this study do support Malinowski's (1948) theory that ritual can be used in times of stress. Ritual was used by the players as a coping mechanism. Dunleavy and Miracle (1981) also found that rituals occurred where stress was perceived or anticipated and were used by athletes as a control mechanism for the anxiety induced by the stress. Some of the players in this study explained that the ritual facilitated the production of arousal so that they were optimally aroused before the start of each game.

Several researchers (Radcliffe-Brown, 1939; Sherman, 1988) have indicated that ritual if not performed correctly can in fact become a source of stress. The ritual may be non-functional or dysfunctional if the player becomes obsessed with its use. However, in the present study none of the players felt that if their ritual was altered, for example, if a player involved in their ritual was injured or traded, it would in fact cause stress.

All hockey teams perform a team ritual around the goalie prior to play. The team ritual is learned through the internal social structures operating within hockey. Players observed these behaviors at an early age and as they joined a team they fit in to the established ritual becoming a member of the group, thus making the transition smooth. The ritual was a means of self-expression, it reinforced a sense of individual

worth without endangering the unity of the group. Players indicated that the ritual was performed to bond and unite the players, thus giving a sense of togetherness. This bonding was communicated among players through movements and words. Womack (1979), states that ritual is used as a communicative device whereby the players convey messages succinctly and emphatically. Messages of good luck, words of encouragement and tapping other players took place during the team ritual.

Throughout the five phases of preparation players made reference to personal and team space both on and off the ice but particularly during the ritual. This notion of territorality is common in other sports, for example, competitive swimmers often use the space behind their block to isolate themselves from others moments before a race. In this study territorality was emphasized particularly in relation to the ice. During the warm-up and the ritual players did not cross over the red line into the opposing team's territory and certain players, particularly the group of five elite, skated and stood in designated spaces with the net serving as the focal point.

In a literature review related to the concept of territorality, Lyman & Scott (1970) propose that there are different types of territories. They identified interactional territories as those areas where a social gathering may occur and stated that every interactional territory implicitly makes a claim to boundary maintenance for the duration of the interaction. Clearly team members displayed a tolerance and respect for other players by allowing them freedom to move into their own space. This supportive activity was displayed by the players as they were aware of each others' personal space. According to Lyman and Scott (1970), mobility is an important characteristic of interactional territories. The research findings do indicate that an essential element of the team ritual was mobility. Players moved in an organized sequential manner on the ice despite the spatial limitations.

The players' experience of preparation for competitive games was different than their preparation for practice games. In her discussion of pregame rituals, Womack (1979) commented that players performed rituals prior to each competitive game but not before practice sessions because there was something "special" about competitive game time. In a similar manner, players in this study expressed the opinion that the experience of precompetitive preparation was different before competitive games. The special nature of the ritual contributed in achieving an optimal level of arousal necessary for competition. Similarly, players felt that their dressing routine was more ordered and thorough before each competitive game. These findings provide further support for the level of involvement theory (Neil, et. al. 1981) which states that the level of perceived importance and consequent anxiety is higher on the day of a game.

***Macroroutines and Microroutines***

Macroroutines and microroutines are precompetitive strategies implemented by athletes to ensure optimal readiness. The findings of this study would tend to lend at least partial support for the results reported in previous research. Gallmeier (1987), found that in order to ensure smooth preparation and guard against surprises, players perform pregame routines. These routines were individual patterns of behavior which lasted throughout the day of each game. Players in this study felt that by implementing their routines they experienced states of physical and mental preparedness which in turn helped build their self-confidence.

Most of the research on pregame routines has focused on closed skill sports, that is a sport in which the player is in control of the timing of the action, for example, golf, tennis or archery (Cohn, 1990; Boutcher & Crews, 1987; Southard et. al., 1989; Lobmeyer & Wasserman, 1986; Van Raalte, et. al. 1991). All of these studies

investigated cognitive behavioral routines in which the athlete performed rehearsal mode task specific movements prior to the putt, volley or shot.

In a study of preshot attentional routines used by golfers, Boutcher and Crews (1987) found that players who utilized a set pattern of movements before each putt produced more consistent putting. The hockey players in this study used routines that were not task specific but rather involved actions that organized their thoughts and behaviors leading up to the start of play. The players believed that by performing routines they were better prepared for a game and were less distracted by external factors. This finding supports the notion proposed by Lobmeyer and Wasserman (1986) who investigated free throw shooting routines and found that accuracy was higher with a preshot routine and more importantly, players tended to over value the effectiveness of the routine. Through the use of a questionnaire they found that 63 percent of the basketball players felt they had shot better after implementing a preshot routine. These researchers concluded that there are psychological benefits in using preshot routines.

***Role of the Coaches***

The interaction that occurs between the players and the coaches during the preparation period is critical. This interaction can be both verbal and nonverbal. Vanek and Cratty (1970) found that many elite level athletes prefer to be alone just prior to competition. These athletes felt that their level of concentration may be broken if demands were placed on them to communicate at this time. In a similar manner, the players in this study commented that they did not always appreciate having to communicate verbally with others before the game. It seems that during the off-ice adjustment phase the leaders of the team were expected to talk and motivate the rest of the team which on occasion detracted from their own preparation.

During the precompetitive preparation coaches should not impart complicated information to the players concerning strategy and techniques (Cratty, 1981). Due to the stress experienced at this time, players are not able to process complicated instructions. On the morning of each game a one hour pregame skate was held at the rink. In this study the technical and tactical aspects of the game were presented at the team meeting after the pregame skate on the morning of the game, thus leaving the coaches and players free to prepare individually with a minimum of interaction during the five phases of preparation.

As each player prepares individually for the game he may need some form of verbal advice in order to raise or lower his level of arousal. Vanek and Cratty (1970) assert that it is imperative that the coach is cognizant of the level of arousal experienced by each of the players. The coach should also know how to best adjust each player's arousal level to ensure it is optimal and then communicate this to the player. According to the players in this study, the captains and veterans were empowered by the coaches to perform this role.

In his discussion on the role of the coach in preparing the players, Cratty (1981) suggests that a coach should approach each individual player rather than limiting himself to team pep-talks. Despite the fact that hockey is a team sport each individual player has different experiences during preparation and it is the coaches responsibility to adapt to each players' individual needs (Cratty, 1981). The findings of this study indicate that the head coach spoke to the team five to ten minutes before the team ritual but was not there to ensure each individual was at an optimal level of arousal. Knowledge of a player's optimal level of arousal is a complicated matter requiring more than a pep-talk to "psych up" the players. Warren (1983) claims that sometimes, "highly motivational appeals may adversely affect the performance of highly-strung

athletes who must execute complex, finely co-ordinated motor skills" (p. 46). Knowledge of a players optimal level of arousal over an extended period of time may be difficult in professional hockey because players are constantly being traded. The coaches need time to establish an accurate relationship and understanding of each players' needs during the experience of preparation so that each player achieves a state of optimal readiness prior to competition.

It appears that the coaches in this study had minimal contact with the players during the five phases of preparation. Perhaps they assumed that the players knew how to prepare for a competitive game. However, several of the rookie and veteran players indicated that they had not perfected some of the psychological strategies, visualization for example, and therefore did not implement these skills. Formal training in psychological skills at an earlier stage in players' careers could prove extremely beneficial in dealing with the pressures evident at the professional level.

***Implications and Recommendations for coaches and players***

There are several implications for both coaches and players that surface from this study. The most important of these is the recognition and understanding that a player's preparation can be improved through careful planning and practise. Incorporating mental training skills and strategies in training sessions is the most practical, effective and efficient way of facilitating learning. Athletes come to training sessions expecting to learn what they need to perform well in competition. Practising mental skills under these conditions increases the chances of learning these skills.

Including such techniques in training means practising physical and psychological skills in conjunction with each other rather than in isolation. Professional teams need to utilize specialists trained in teaching these mental skills because in the past athletes have haphazardly gone about implementing these

techniques. For example, telling a player it is beneficial for him to go and visualize is not sufficient. He must first learn how to visualize. Part of the overall helping process may involve educating or re-educating some coaches, managers and players to the fact that psychological coping skills need to be learned and do have benefits.

An assessment of each athlete's mental skills should be done as early as possible in the regular season. Assessments can be facilitated by using tools like Orlick's (1986) Competitive Reflections form or Suinn's (1986) self-assessment questionnaires. According to Orlick (1986), the Competition Reflections form is an important tool for developing a detailed and constructive precompetition focus plan for each athlete. Based on the questionnaire results, coaches and players can then decide on a mental skills plan to be followed during the season. Mental skills that need to be learned and practised include: relaxation, self-talk, focusing attention, refocusing, visualization, and concentration. The skills, once learned, can be used throughout both the preparation and the game.

Evidently the team ritual served many positive functions in preparing individuals and uniting the team before the start of play. After twenty minutes of rest in the dressing room, warm up decrement had occurred. The players in this study were aware of the physiological and psychological benefits that the team ritual provided and therefore repeatedly involved themselves in some way. Furthermore, the concept of player status revealed that a hierarchy existed giving some stability to members of the team. This occurred despite the lack of permanency of players due to trades and injuries which were common during the 1991-1992 season. This finding suggests that team rituals can be implemented by players to give stability and cohesion to existing team members regardless of any external factors that result in structural changes within the team.

***Propositional statements***

Although the findings of this study are not generalizable, several propositional statements have emerged which should be tested in future studies. Some of these statements are presented below, and it is hoped that these will be of assistance to future researchers interested in team or individual precompetitive preparations.

The propositional statements identified as a result of this study are:

1. To achieve a state of optimal readiness players need to prepare physically, emotionally, and psychologically.

2. Despite individual differences, all professional athletes experience pressure before competition and all implement routines and rituals to cope with stress as a part of the preparation process.

3. Preparing for competition at away venues can be made easier through the implementation of established rituals and routines.

4. Team rituals give the team a sense of bonding and stability before the start of each competitive game.

5. Team rituals act as a mechanism to cope with stress experienced by the players before each game.

6. Team rituals reduce the effects of warm-up decrement that occurs after players return to the dressing room for twenty minutes.

7. By implementing rituals and routines a player's precompetitive behavior is more consistent resulting in increased self-confidence.

8. Too much interaction with coaches and other players during preparation can be distracting and cause a player to perform below his potential.

The experiences described in this study of players preparing for a competitive game may be evident in other sports. For example, gymnasts may go through the

process of maximizing readiness by using rituals to chalk up before competing on the uneven bars. However, further investigation of other sports using grounded theory would be necessary to verify these propositions.

## VI. SUMMARY AND CONCLUSIONS

This study examined the experience of hockey players as they prepared for competitive games. A review of the research literature concerning pregame rituals provided valuable information related to this process. However, these studies revealed that investigators tend to explore particular aspects of preparation which result in a fragmented body of knowledge. In addition, the review of these studies disclosed that the majority of researchers had not attempted to examine this experience from an emic perspective. Consequently the grounded theory method was utilized to describe the preparation in it's entirety from the players' perspective. Interviews involving fifteen professional hockey players between the ages of 21 to 32 were the major source of data.

The findings of this study indicate that the experience of players before each competitive game is a process comprised of five phases: the arrival, dressing, on-ice warm-up, off-ice adjustments, and the team ritual. As the individual progresses through each phase, he attempts to get the body ready, get a feel, and get the mind ready. The players' descriptions reveal that they implement rituals and routines as strategies to order their preparation. These rituals and routines include a wide range of physiological and psychological techniques. For example, players perform visualization, relaxation, self-talk, and stretching prior to each competitive game.

The findings also indicate that the degree of adherence to and complexity of these strategies differs significantly among players. Veteran players have more sophisticated and complex routines which operate at two levels: macroroutines and microroutines. Furthermore, these routines are beneficial for away games where the players do not allow unfamiliar surroundings to intimidate or distract them during preparation.

By simply observing the behaviors of athletes, assumptions cannot be made regarding the practice of precompetitive rituals. Only by asking each individual athlete can an observer know whether the athlete is engaging in a ritual or a routine. Furthermore, operationally defining the term ritual poses problems. As a result of interviewing the players in this study, it is apparent that aspects of several definitions of ritual in the current literature can be applied. The players feel that the team ritual is potent without believing in an external being or powers. Similarly, their behaviors exhibit all of the characteristics of performative rituals yet the players state they do not go through a trance-like or liminal state during this time. Perhaps a combination of the short duration of the team ritual, the fact that the players are on skates on the ice, and the timing of the ritual in relation to the start of the game, do not permit the players to assume a liminal state.

The role of the coaches during the five phases of preparation is minimal according to the players interviewed. Research has shown that coaches should not impose upon an individual player's preparations by calling the team together for too long, by imparting too much information during this time, or by attempting to get the players hyped up for the event. However, coaches need to be aware of each players optimal level of arousal and employ techniques to ensure each individual achieves a state of optimal readiness before the game. This requires a knowledge and understanding of every players' physiological, emotional and psychological precompetitive preparation needs. Empowerment of the captains and veteran players can be useful during the preparation but should not be such a large responsibility that it becomes a burden which detracts from their own personal preparation.

Further research is required in order to establish a more complete understanding of the experience players go through before each competitive game. However,

common strategies the players used to achieve optimal states of readiness were exposed in this study. From these findings, a number of propositional statements were derived and it is hoped that these will be of assistance to other researchers.

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## APPENDIX A

**University of Alberta**
**Department of Physical Education and Sport Studies**

**Precompetitive Preparations in Professional Hockey**

INFORMED CONSENT FORM

**Project Title:** Investigation of the precompetitive preparations of hockey players.

**Investigators:** Judith Keating (4398013) and Dr John M. Hogg (4925910)

The purpose of this research project is to increase the understanding of those involved in sport (psychologists, athletes, coaches, trainers etc), of an athlete's precompetitive preparations. It is hoped that by using precompetitive preparations, performance will be enhanced.

Each subject will be interviewed at least twice. The interviews will last approximately 30 minutes to 45 minutes. During these interviews you will be asked about your experience of precompetitive preparation, (e.g., your thoughts and feelings about pregame behaviors), both as an individual and as a part of a team. These interviews will be audio-taped and later transcribed. In order to protect your anonymity, the tapes and their associated transcripts will be assigned an identification number and stored in a locked filing cabinet. After the initial interview, the information gained from your participation will be made available to you, so that you may comment on the accuracy of the investigator's interpretation of your data.

The final research report, including anonymous quotations, will be available to all participants, and will be presented in a Masters Thesis. The research findings may be published in a journal and every effort to ensure the anonymity and confidentiality of the subjects will be made. Although there may be no direct benefits to participants in the study, the research findings may eventually result in changes by athletes and coaches at various levels of involvement to precompetitive preparations.

**Precompetitive Preparations in Professional Hockey**

INFORMED CONSENT FORM

This is to certify that I, _____(print name)
hereby agree to participate as a volunteer in the above named project.

I understand that there should be no health risks to me resulting from my participation in this research. The potential benefits of this research to me include increased self-knowledge (e.g., factors that might help me better understand and improve my pregame preparation). However, I recognize that there are potential risks involved when discussing personal issues (e.g., feelings of embarrassment).

I hereby give permission to be interviewed, and for these interviews to be recorded on audio-tape. I understand that three months after completion of the research (i.e., after the investigator's final oral defense), the field notes will be destroyed. I understand that the information may be published, but that my name, or the name of the team that I play for will be kept anonymous and confidential.

I understand that I am free to refuse to answer questions during interviews. I also understand that I am free to withdraw my consent and terminate my participation in this project at any time without penalty. I have been given the opportunity to ask whatever questions I desire, and they have all been answered to my satisfaction. I acknowledge receipt of this consent form.

Signed.

_____ _____

Participant Researcher

_____

Date

## APPENDIX B

**University of Alberta**

**Department of Physical Education and Sport Studies**

**Precompetitive Preparations in Hockey**

DEMOGRAPHIC DATA

To be completed by Participant

1. Age (Years): _____
2. Current playing position(s): _____
3. Number of years playing hockey: _____
4. Number of years playing amateur hockey: _____
5. Number of years playing professional hockey: _____
6. Number of years playing with the current team: _____

## APPENDIX C

### MACROROUTINES

1. Visualization (night before game).
2. Drive to rink
3. Pregame skate
4. Team meeting (game videos).
5. Drive home.
6. Pregame Meal
7. Sleep, Relax
8. Drive to rink
9. Arrival
10. Dressing
11. On-ice warm up
12. Off-ice adjustments
13 Team ritual

# VIII. ADDENDUM

## The Research Process

### *Introduction*

So often what is recorded in a bound thesis reveals little about researchers and even less about their experiences during the research process. Apart from the knowledge gained in our area of "expertise" we have learned a great deal about ourselves. There are several reasons for researchers to record their thoughts, feelings and growth during their research. Firstly, for me, it seemed appropriate to write about the research process at a time when I was experiencing difficulty in analysing my data as it enabled me to concentrate on what I had learned rather than focusing on how much I did not know. Secondly, it was cathartic to write about some of the trials and to remember the tribulations I had encountered during the process. Thirdly, self reflection can be enlightening. A personal account involves self-reflection and implies a sense of pride in one's work (Bell & Ensel, 1978). Finally, others may read and identify with or learn from what I have experienced.

This addendum outlines the research process as I experienced it while studying precompetitive preparations in professional hockey. It addresses issues I felt pertinent to my personal and academic development as my thesis evolved. Finally other personal accounts that have been documented by researchers are referred to within the addendum.

### *The Graduate Student*

As a graduate student, being immersed in the research process became a way of life. Mills commented that "the intellectual workman forms his own sense of self as he works towards the perfection of his craft." (1959, p. 216). In retrospect, at the outset of my graduate program I had limited exposure to and was naive with regard to the

research process. The full implications of writing a thesis were beyond my scope of knowledge.

Once I began taking philosophic, theoretical and research methods courses I became more aware of what research involved. Slowly I began questioning the opinions, beliefs and behaviors of myself and others. I found that as the research experience progressed, I had more questions and less satisfactory answers. I found myself discussing and debating a variety of issues such as, basic philosophies about reality, truth and, the acquisition of knowledge. The research process has, as Mills (1959), implies, helped me to develop and refine my sense of self.

As with all graduate students, finding a topic of interest that also contributes to the existing knowledge in an area of study is of paramount importance. Initially my research topic was broad and the questions numerous, evolving over a period of time. After observing behaviors of an elite group of athletes I began to ask myself "why are they behaving in this manner?" "Is this experience the same for each member of this team?" The central question that I chose to guide my study was, "What are the experiences of professional hockey players as they prepare for competition?" The challenge now was to find a "scientifically rigorous" method that could adequately answer these questions.

My research question evolved inductively from my observations, personal experiences and interactions with others. I began to realize that my questions did not "fit" with the quantitative research methodologies which I had thus far been exposed to. Bottomley (1978), confirms the process that I was experiencing at that time. He questions why the system covertly encourages students, in the name of numeracy, to apply mathematical sophisticated tests to all data when this can only be done by ignoring the extremely arbitrary and precarious nature of the data? At this time I was

unaware of the dichotomized philosophies and opposing methodologies used in research.

***Philosophical Perspectives***

It appears that philosophers of science and methodologists have engaged in an epistemological debate about how we should conduct research. What theory best explains how we come to know our external world? Two fundamentally different inquiry paradigms exist: positivism which uses quantitative and experimental methods to test hypothetical-deductive generalizations, and interpretive inquiry which uses qualitative and naturalistic approaches to inductively and holistically understand human experience (Patton, 1990). Being exposed to only the positivist view, (as I was unaware of at the time), I completed a graduate level statistical analysis course. At this time it would have been beneficial to also do a qualitative research course.

***The Research question***

Lack of exposure to the interpretive perspective caused me to be faced with the dilemma of whether to pursue my interests or to abandon my initial research question and opt for a quantitative study. Subsequent exposure to qualitative methodologies allowed me to pursue my question. It was only during the data analysis stage that my decision was reinforced, as C. W. Mills states, "Do not allow public issues as they are officially formulated, or troubles as they are privately felt, to determine the problems that you take up for study" (1959, p.248). In the process of analysing transcripts I realized how "rich" the descriptions were and was glad that I had chosen the qualitative method of inquiry to investigate the process.

## Theoretical Paradigm

### *How can I explore this question?*

Once deciding upon a method of inquiry I then needed to decide upon a framework for action that would provide my study with direction. Numerous questions began formalizing in my mind at this time. I was fortunate enough to attend a qualitative health research conference and it was here that I realized I could pursue my research by talking with people about the phenomena I was interested in. Qualitative procedures would provide me with a means of accessing unquantifiable facts about people.

The questions I was asking were not the only criteria for choosing a qualitative methodology. My purpose was to find out about the process professional athletes go through in preparation for competition. What is the meaning of their individual and group behaviors? Consideration also had to be given to the time and resources I had available in order to conduct the study.

### *Qualitative Research*

"Qualitative inquiry infuses the ordinary events of daily life" (Eisner, 1991, p.15).

What struck me the most about deciding on doing qualitative research was the reaction from those around me. Many asked the same questions, "What is your hypothesis?" or "How large is your sample?" When I responded that qualitative research was not a one-shot deal like quantitative research and that these questions could not be answered I generally encountered negative reactions. I argued that an understanding of the process athletes go through would emerge from the experience in the setting and theories about what was happening were grounded in the data I collected rather than imposed *a priori* through hypotheses.

Bottomley's (1978), experience was similar, "the sterile mode of serious scientific discourse is quite unsuited to capture the experiential richness of social life, yet to deviate from the convention in this regard makes it that much harder to be taken seriously" (p. 231). In hindsight I can thank all of the critics for making me think through and defend every decision I made during my research study.

Indeed, something felt right about a naturalistic inquiry (rather than controlling the environment), and inductive analysis whereby I began by observing, looking for patterns and emerging categories. The fundamentally people-oriented nature of qualitative inquiry excited me. I could ask the informant's point of view without predetermining what was important. I could gain some understanding of how they organized their world, their thoughts about what was happening, their experiences and perceptions.

The concept of researcher as the instrument for data collection and analysis, especially myself the novice researcher, was met with laughs and comments by other graduate students. However in qualitative research where the inquirer is the instrument,

> changes resulting from fatigue, shifts in knowledge, and cooptation, as well as variations resulting from differences in training, skill and experience among different "instruments" easily occur. But this loss in rigor is more offset by the flexibility, insight and ability to build tacit knowledge that is a peculiar province of the human instrument (Guba & Lincoln, 1981, p. 113).

Debates with other graduate students often centred around the problems with the subjectivity and flexibile nature of interviews compared to the advantages of controlled and structured questionnaires.

## A Strategic Framework

### *Symbolic Interactionism*

There were numerous qualitative approaches that I could have chosen. They varied in the conceptualization of what was important to ask. The framework I chose was symbolic interactionism. The question asked here was, "what common set of symbols and understandings have emerged to give meaning to these athlete's interactions?" This perspective placed importance on the meaning and interpretation of human processes. "People create shared meanings through their interactions, and those meanings become their reality" (Blumer, 1972, p. 145). Only through close contact, direct interaction, naturalistic inquiry and inductive analysis could I understand the symbolic world of these athletes.

## Appropriate Methodology

### *Grounded Theory*

Symbolic interaction study "requires the student to catch the process of interpretation through which they (the informants) construct their actions" (Blumer, 1972, p. 145). Grounded theory is a method for doing this as it considers the phenomena under study in its totality and enables the researcher to view the experience from the athlete's perspective, that is from an emic point of view. "Grounded theory is based on the systematic generating of theory from data, that itself, is systematically obtained from social research" (Glasser, 1979, p. 2). Researchers develop their theories by applying their creative intelligence to the data. Grounded theory requires the researcher to think and discover.

## Gaining Access to the Study Group

### *Soliciting Participants*

In retrospect I entered this phase of the research process naively. I assumed that the informants would happily volunteer their time to talk to me about their experiences. Having never dealt with professional male athletes I was unaware that they were accustomed to being paid for their time. I quickly realized that if I was to schedule any interviews at all, I not only had to create a rapport with these athletes, but I also had to market and sell the idea to them. I spent many hours at the rink watching, waiting, smiling, engaging in small talk and finally setting up interviews. I found this process extremely frustrating and my enthusiasm slowly waned.

### *The Logistics and Timing*

After consulting various hockey coaches I decided to start gathering my data during the three week preseason training camp. The reason being twofold. First, there were over fifty players in the camp, twenty of these players were staying at a nearby hotel and therefore were accessible. Second, it was considered to be a good time of the season to approach the players because each day a host of strangers were demanding their time for such things as autographs and photographs and they were expected to give it.

## First Months in the Field

### *Problems Encountered:*

#### *Demands on the players*

"Always be suspicious of data collection that goes according to plan. Research subjects have been known to be people" (From Halcoms Evaluation Laws as cited in Patton, 1990, p 143.).

Being a professional hockey player means having a flexible and uncertain schedule. This presented problems for me when attempting to collect data. Players were unsure of the day-to-day practice times, and unforeseen injuries, and commitments that were expected as part of their contracts all affected the interviewing. Interviews were often cancelled or I was left waiting and wondering. However, once the initial interview was conducted and rapport established, players were more receptive to disclosing a contact number for the follow-up interview.

I sensed that the concept of a researcher being interested in their behaviors was foreign to these athletes. Many were willing to talk with me for ten minutes but could not commit themselves to a longer period of time or were unwilling to meet me away from the familiar dressing room environment. It was outside the dressing room that I had to 'sell' my research to the players and reiterate that I was not from the media. Obviously the players were aware of the expectations the media have of them as it was common practice to be interviewed in the short walk between the ice and the dressing room.

The concept of reciprocity as discussed by researchers (Lofland & Lofland, 1984; Gurney, 1985), was evident. Players expected something in return for their time. While soliciting for informants I was asked "How much do I get for the interview?" and at the completion of an interview one informant asked "Do you give me an evaluation form?" I had to grapple with the knowledge that paying players for participating would weaken the validity of the study therefore I did not pay the players. The principles of theoretical sampling, a strength of grounded theory methodology, is in direct opposition with paid participation.

## Analysing the data

### *Transcribing*

The first major task in analysing data for any researcher is to become familiar with the data. One way this can be achieved is by transcribing the tapes as soon after the interview as possible. Grounded theory requires data to be collected, transcribed and analysed concurrently thus the researcher becomes immersed in the data.

I transcribed each tape verbatim. Each hour of interviewing took approximately 6-7 hours to transcribe. I then open coded and categorized one interview before the next was carried out. I found this phase of the process physically and mentally exhausting and soon realized that I could only complete one "good" interview each day. At the same time I was cognizant of the time constraint; preseason training camp was coming to an end far too quickly. As a result the interviewing process spanned over six months.

### *Need for support*

Unlike quantitative methods where the analysis of numbers is fairly straightforward once it is correctly entered into the computer and given the appropriate commands, the analysis of qualitative data is not as clean cut. Analysing qualitative data is more painstaking and time consuming and demands that the researcher think abstractly and creatively without loosing the intended meaning of the informant's experiences. As I became more aware of what a large task this was I also recognized the need to discuss my ideas and discoveries with others.

I felt it would be beneficial to form a multidisciplinary student support group. Each week 6-8 students from three faculties met and discussed issues related to our specific research. Here, ideas were presented, views expressed, biases discussed and frustrations aired.

## Conclusions

As with most researchers I am indebt to many people. It is only because of the players' goodwill that I have been able to observe and interview them about their precompetitive preparations, an important part of their lives. I am also indebt to those who control access to this group, as Wild says, "they are an important set of scientific gatekeepers" (1978, p.193). These gatekeepers allowed me observation and interviewing privileges normally set aside for team personnel and the media.

As a graduate student I could identify with some of the experiences Gilroy (1981), described. However, the strategies for analysis of grounded theory appear to be more refined with the numerous publications in the past ten years. Working with a group of elite male athletes was an interesting experience and although I had limited access to the players I shared some of Gurney's (1985), experiences. I found her article particularly useful in trying to clarify my thoughts and feelings on the issue of being a female researcher.

In conclusion, I have outlined, in part, what the research process has entailed for me. I have grown both academically and personally from the experience and I have gained a greater understanding of the process professional hockey players experience before each game.